

MOTOR AGE

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\$2.00 Per Year

WHITE MOUNTAIN ENDURANCE TEST



THE MOTOR AGE MAN
AT THE END OF
THE WEEK

MOUNT PLEASANT HOUSE, Bretton Woods, N. H., July 15—

The first annual endurance run held in the Mount Washington district was concluded to-night, and the committee awarded medals of gold to sixteen of seventeen competitors, and a silver medal to the other one. No tougher proposition in the way of an endurance run was ever carried

through in any country; for 2 days the cars traveled mile after mile through the mountain district, rushing down and climbing hills quite as tough for a few miles as those up the mountain side. A fair speed was followed throughout, and that the cars came through, so many of them without trouble, is cause for wonder. As a test of the cars the trip was grand, and as an enjoyable trip for the contestants it was one of the best ever known. Town after town had made special preparations to receive the visitors and each town was a control. Triumphal arches were seen in many of the most prominent places and the hotels of the district were decorated nicely, each providing the visitors with lunch and punch, the trip developing into quite as much of a test for the participants as for the motors, as all of the visitors made strenuous efforts to participate in the good things laid before them in order that they might show reciprocity towards the hotel men in their efforts to add to the enjoyments of the occasion.

Each hotel and each city was a control, in which the motors were stopped and in which the stay was more or less prolonged. There was no hurry at all at the stopping points, the hurry coming when a run was made from point to point. A schedule was followed in a way, and the return each day to the starting points at the Mount Pleasant and Mount Washington hotels was practically on time. Promised rain on the last day caused a grand scorch through the Crawford notch to the finish at the hotel and some grand time was made.

On both days James L. Breese and Harlan W. Whipple, both in 40-horsepower Mercedes cars, averaged from 22 to 23 miles to the hour, carrying full loads over the hills without trouble.

The residents along the line were warned generally that the automobiles were coming and the roads were clear almost without exception. At farm house after farm house the horses were tied at the roadside to accustom them to the automobiles, and those who trailed the bunch said the horses had become accustomed nicely to the automobiles before the line had passed. The farmers themselves were out with entire families to shout a welcome to the motorists, who invariably responded in kind. As a missionary trip the endurance run was a huge success, and when next year the automobilists return the farmers will again welcome them with open arms. Had the visitors stopped wherever asked to do so 4 and not 2 days would have been taken for the run.

Those who participated in the run of the first day were the following: Frank Nutt, Haynes-Apperson light touring runabout, F. E. Spooner, observer; Arthur Gardiner, Rambler touring car, F. A. Ross, observer; H. W. Alden, Columbia, S. M. Butler, observer, Mrs. Butler and chauffeur; Webb Jay, White steamer, R. C. Emory, observer, E. J. Denser and J. J. Hantak; George H. Lowe, White steamer, Mrs. Walsh, W. Schmunk and John B. Parkinson, observer; L. R. Speare, Winton, General Waldron of the governor's staff, observer, Miss Speare and Mr. Nichols; Harlan W. Whipple, 40-horsepower Mercedes, Charles J. Glidden, observer, John Anderson,

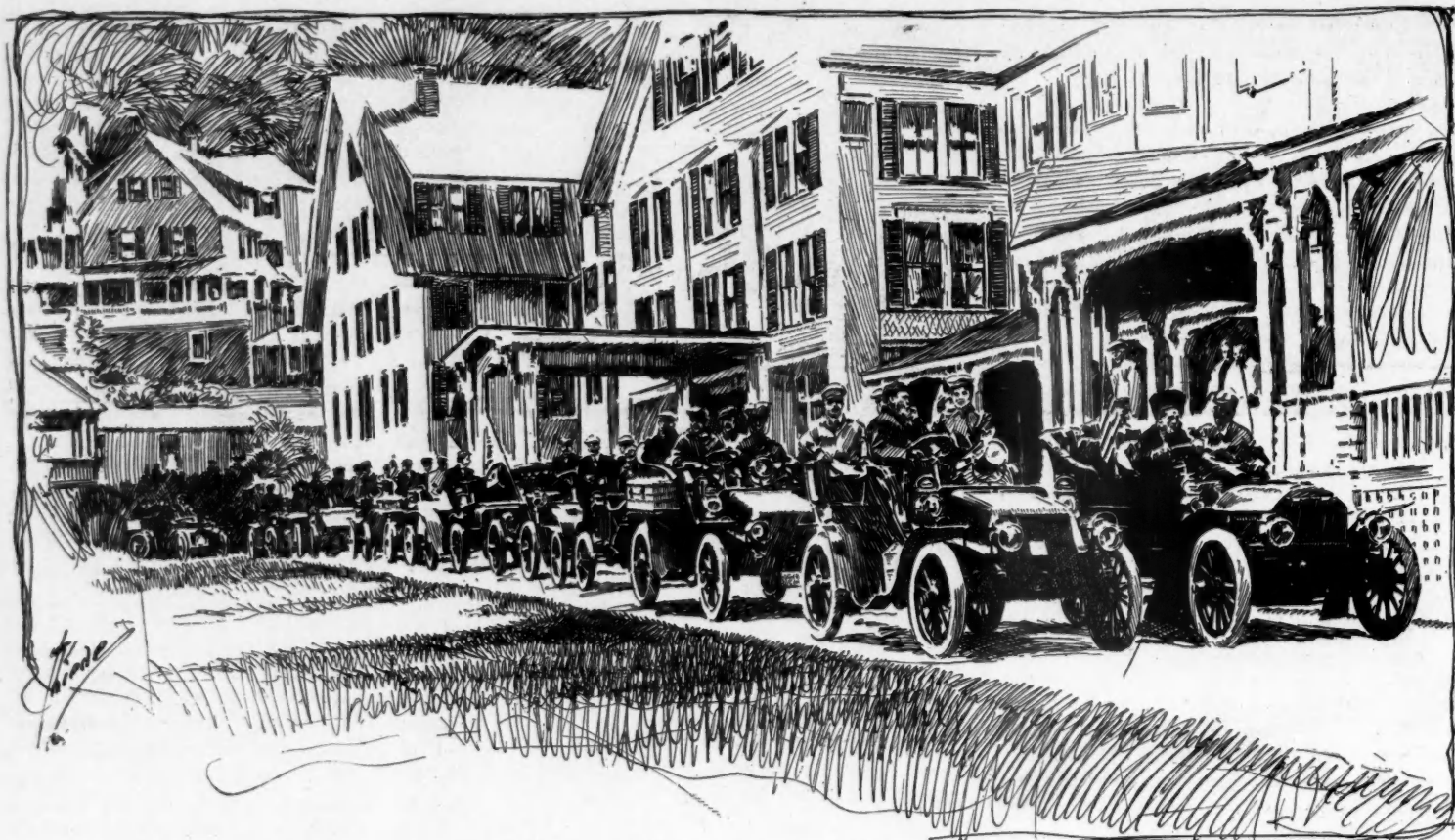
Charles Donohue; James L. Breese, 40-horsepower Mercedes, Governor Batchelder and O. H. Lamont; John Prouty, Winton, Mrs. Prouty, H. L. Johnson and S. A. Miles, observer; George J. Burly, Winton, Mrs. Speare, owner of the car, Miss Mason and J. D. Porter, observer; L. J. Phelps, Phelps, Mrs. Phelps and Charles Towne, observer; F. E. Stanley, Stanley, Mrs. Stanley, Mr. Stanley used E. O. Winsor as observer; Harry Fosdick, Winton, Mrs. Fosdick, Willie Shay, A. G. Batchelder and Oscar Hedstrom, observer; Alexander Winton, Miss Helen Winton, Fred Shaw and J. C. Kerrison, observer; Otto Nestman, Stevens-Duryea, C. C. Hildebrand and E. O. Winsor, observer; Percy Pierce, Great Arrow, C. McGuire, W. J. Morgan, observer; Jack Davison, Packard, J. A. Lamper and wife and J. Felt, observer, and Mrs. Felt. In addition to the regular cars in the run U. L. Hathaway and wife traveled independently in a Stanley steamer, as did B. A. Lamont with a Cadillac, carrying the photographers. Both cars made the 2 days' run without mishap.

The start on the first day was made at 7:20 from the Mount Pleasant house, Whitefield being reached at 8:20, and the departure at 8:45, the Mount View at 9:00, Lancaster at 9:35, leaving at 10:15; Littleton at 11:30, leaving at 1:40; Sugar Hill at 2:15, leaving at 2:30; Franconia inn at 2:39, leaving at 3:00; the Profile house at 3:32, leaving at 4:13; Forrest Hill house at 4:50, leaving at 5:07; the Maplewood at 6:05, and home at 6:39.

At Whitefield, where the first stop was made, the public square, reached upon a sudden turn under an arch of welcome, was decorated gayly



AMONG THE CLOUDS ON MOUNT WASHINGTON



THE ENDURANCE RUN AT THE PROFILE HOUSE

and scores of school children occupied seats in a semi-circle. Arrayed all in white and waving American flags, all of them while singing national anthems, they presented a gala appearance. Here the first stop was made in the day's run, lunch being served in the public square. Huge pitchers of punch occupied hollowed-out places in cakes of ice. Addresses were made to the children and hundreds of the townspeople who gathered round by Governor Batchelder, John Anderson, Charles J. Glidden, John B. Parkinson and others.

During the speechmaking Mr. Winton was bound for the Mount Pleasant with Harry Fosdick to secure a new rear wheel. Mr. Fosdick had been forced into a ditch by an accident, putting his rear wheel almost out of commission. Mr. Winton made the round trip in 45 minutes, covering 28 miles, and 10 minutes were spent at the garage securing another wheel. Mr. Winton drove the four-cylinder car. The repair was effected and Mr. Fosdick and Mr. Winton closed with the main line at Lancaster.

At the Mountain View house en route to Lancaster a party of children in cherry and white shouted for Princeton, constantly waving flags, and at Lancaster ex-Governor Jordon dispensed the punch in the parlor of the hotel. A. S. Bachelder, Colonel Henry O. Kent and other prominent persons did all possible to make the stay of the automobilists enjoyable. From Lancaster the trip was for 2 miles along the Connecticut river valley to Littleton, entering this busy little metropolis by the road around the end of the Dalton mountain range. The home guard of Littleton met the visitors and again they were wined and dined in royal style. From Littleton the journey continued over the Indian Brook road into the deep valley of Franconia. After emerging from this valley the troubles of the day were nearly over. The castles on Sugar hill, the Franconia inn, Sunset Hill house and Look-off were visited one by one, and then the Profile house, a beautifully located spot where all wanted to re-

main for a long rest. The Forrest Hill house, Bethlehem, the Sinclair house and the Maplewood, where L. H. Cilley and General Crafts entertained the visitors. Thence the run was back to Fabyans and the Mount Pleasant past the Twin Mountain house, a total distance for the day with at least ten stops of 93 miles in 11½ hours, and a trip long to be remembered owing to the grand hospitality of the people and the splendid reception given the visitors.

After their strenuous life of the first day the participants in the endurance run prepared themselves for another day of enjoyment, and seats in the cars were at a premium, for every hotel visitor was crazy to take part in the journey which in extent was about equal to the first day's journey, with more hills but better roads withal. All eyes were on Harlan W. Whipple and James L. Breese, as these gentlemen averaged for the first day's journey 25½ miles an hour. For the second day a change was made and Breese and Whipple were sent away in the first division, and for the second division the participants drew lots for position in line, being required to remain in line throughout with a safe distance intervening.



HARKNESS ON CURVE AT START OF CLIMB UP MOUNT WASHINGTON

The Presidential range was encircled during the day and the stops were fewer, the first being at the Glen, where the Mount Washington climb started. The day was clear and bright and the Summit house could be seen plainly 3 miles away, with the roadway winding up to it through the woods and above the tree line. The line moved out through the western gateway at Fabyans, past the Twin Mountain house at Fabyans, once famous as the home of Henry Ward Beecher, thence around the Cherry mountain, the Pondicherry of colonial history; across the foot of the avalanche of '85, the last of the White mountains bringing death in its track, across Stag hollow to the Highlands, passing the Pliny Range house, and stopping for the first control at Ethan Allen Crawford's place, 13½ miles farther. The house is at the junction of one of the great mountain highways constructed by the state of New Hampshire. The grandfather, Ethan Allen Crawford, was the most famous of all the White Mountain pioneers, a giant in strength and nerve, who constructed the first trail to the summit and the first wagon road to the base of Mount Washington.

Ethan Allen Crawford; the third, is already the staunch friend of the motorist who essays to journey by his mountain home. At the top of the next hill is the Mount Adams house, with a commanding view. From this point an excellent road carries to the Ravine house, 6 miles; continuing on the road towards Gorham, 1 mile, and thence a sharp turn to the right, the road leads over a shoulder of Mount Madison to the Glen house. This hill, 3 miles in length, is a hard one, requiring all of the hill-climbing powers of the cars. From the Glen the peaks of the Presidential range have an Alpine appearance, being sharper in outline and more precipitous and craggy than from any other point of view. Through Pinkham notch and down the Long Spruce hill, passing unseen the most beautiful of the cataracts of the mountains, Glens Falls and the Crystal Cas-

cade, past also the scene of the only highway robbery in the history of the mountains, the Wentworth hall in Jackson, is reached.

General Wentworth, the Chesterfield of the mountains, gave royal welcome to the participants in the run, for he insisted upon their remaining with him 2 hours and then tendered the fifty-six participants a royal dinner. His magnificent house is but 12 miles, or about 45 minutes, from the starting point, and promises to be headquarters next year for all starting in the mountain climb. From the home of General Wentworth the tour continued to North Conway, where at the Kearsarge a royal reception was also made at the Intervale for lunch, Bernard S. Mudgett tendering the visitors a salute.

After leaving Intervale there came the final struggle of the contest, following the banks of the Saco river through the main pass of the mountains, Crawford notch. No automobile drive in this country will in any way compare with this through the notch. The roadway winds through arbors of trees, being entirely shaded for mile after mile. The creek runs alongside the road, which mounts and mounts to the Crawford house, 1,920 feet in height. Just beyond the gate of the notch stands Crawford's, the historic center of the mountains and more widely known than any other hostelry. From here the run is short to the Mount Pleasant, 4 miles, and along this stretch the automobiles tore at 30 miles an hour to the finish. James L. Breese and Harlan W. Whipple completed their journey first, being 8 minutes apart. At the start at Intervale, 29 miles away, they had been 10 minutes apart, owing to delay on the part of Mr. Whipple, whose tonneau bottom had been lost. On the road Mr. Whipple passed twelve machines traveling along at 30 miles to the hour. He made



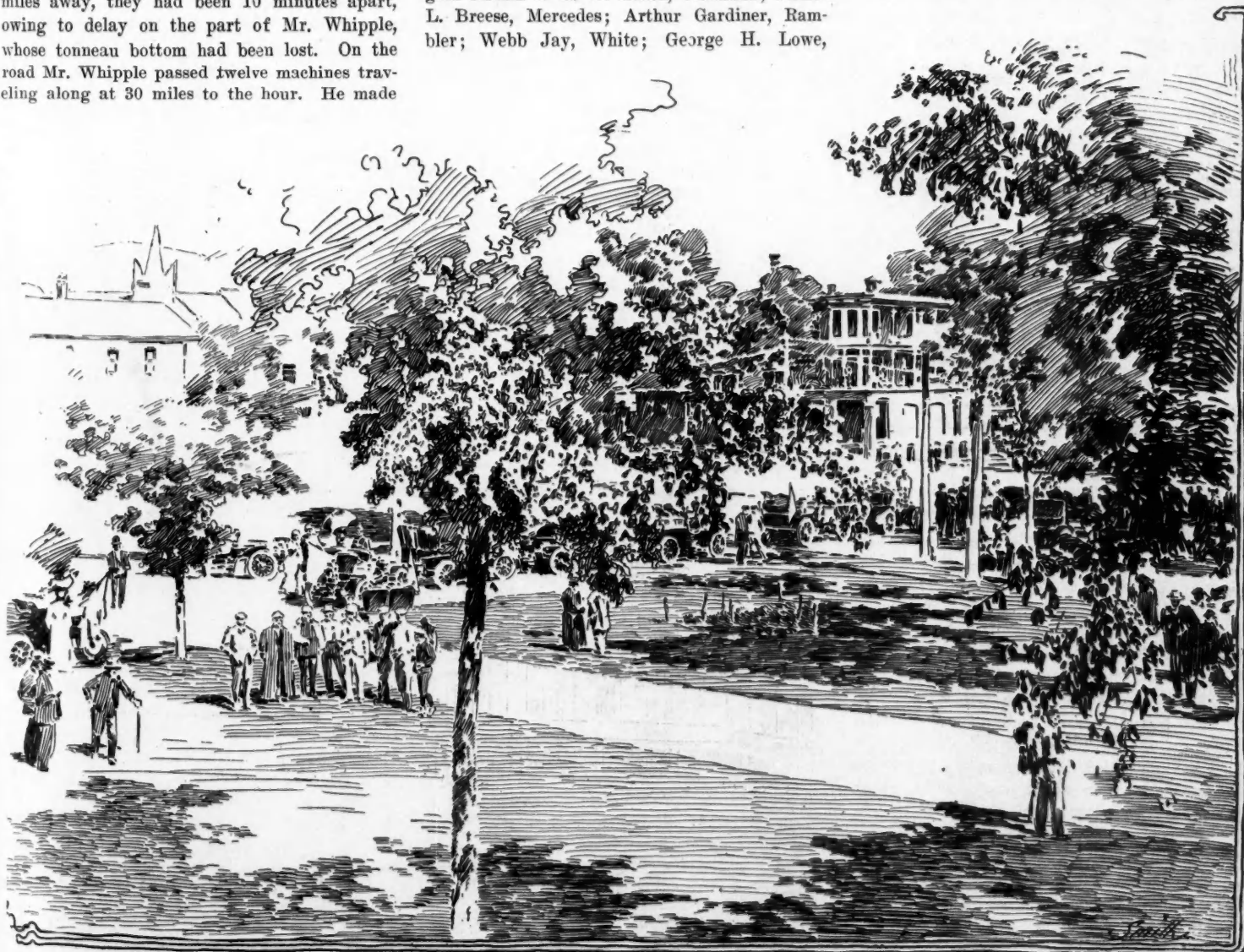
HARKNESS FINISHING OVER THE HILL AT END OF HIS GREAT CLIMB

a grand run through the notch, closing 2 minutes on Mr. Breese.

Messrs. Fosdick and Phelps entered into an argument for position near the Glen cottage and extending for several miles back, and Mr. Phelps stripped his gears. Otto Nestman in the Stevens-Duryea stopped and picked up Mr. Phelps, towing him in at a good clip to the Jackson house. Mr. Winton and Mr. Fosdick had minor troubles, which caused delay but were immaterial, one having plug troubles and the other a broken chain. The committee received the reports of the observers immediately after the run, and Messrs. Miles, Butler and Parkinson issued gold medals to H. W. Alden, Columbia; James L. Breese, Mercedes; Arthur Gardiner, Rambler; Webb Jay, White; George H. Lowe,

White; Frank Nutt, Haynes-Apperson; J. B. Prouty, Winton; Percy Pierce, Great Arrow; Harlan W. Whipple, Mercedes; Harry Fosdick, Winton; C. C. Hildebrand, Stevens-Duryea; J. A. Lamper, Packard; F. E. Stanley, Stanley; L. R. Speare, Winton; Mrs. Speare, Winton, and Alexander Winton, Winton, and a silver medal to L. J. Phelps, Phelps, for perfect work 1 day.

The endurance run brought a lot of discussion regarding the Glidden cup for a reliability test next year. Mr. Glidden briefly related his plans as follows: "The cup will be tendered to the A. A. A., which will have full charge of the event. The cup will be valuable, as I shall spend at least \$2,000 for it. My touring has naturally caused my interest to center in touring, and I hope to see an annual contest such as this one quite as great a feature as the James Gordon Bennett race for racing cars. Owners only will be allowed to drive in this feat, which will be of 1,000 miles, covering 10 days of 100 miles daily, and 10 hours each day. The strictest rules will be enforced, as the winning car must be thoroughly competent in every way to stand the hardest strains. The course selected will be one which will tax the cars to their utmost over hills and all sorts of touring roads, and in order that the contest may be fair for all the car will be required to carry a full complement of passengers, including the owner, a mechanic or chauffeur, the observer and one passenger for tonneau cars with 150 pounds of baggage. That is the amount I carry." Mr. Whipple, president of the A. A. A., said the conditions would be arranged very carefully



THE ENDURANCE RUN PARTY UNDER THE TREES AT WHITFIELD



OFFICE OF "AMONG THE CLOUDS," THE PAPER PUBLISHED ON MOUNT WASHINGTON

and that the rules would be very strict throughout.

The first annual climb to the clouds closed grandly. Not an accident or untoward incident marred the week of enjoyment and sport, and the competitors and visitors to the number of about two hundred voted the event a grand success. For next year the plans for the climb will be enlarged upon and a great many improvements will be made in the running of the events.

For an opening meet the first was so markedly successful as to attract attention generally. The events up the mountain were run promptly and on schedule. The events did not take the 4 days anticipated, and one competitor at least was very much put out. Oscar Hedstrom with the Indian motorcycle expected to eclipse the running time of the automobiles and failed. He arrived in time to make his run on schedule, but found that the hill-climbing events were then over. The weather was such on Wednesday that numerous time trials planned could not be made and the record of H. S. Harkness, 24:37 3-6 for a 60-horsepower Mercedes, will remain the best record until next year, when the toll road may be used again. No private trials will be possible during the year, and Mr. Harkness will wear his honors for a year to come. Mr. Stanley with his 6-horsepower Stanley and his record of 28:19 2-5 will hold that record for a year also. Mr. Stanley said regarding his lost record: "I lacked power and it is now up to me to go and build a car powerful enough to eclipse

this time of Harkness." The record time of Morrison for a 24-horsepower Peerless touring car of 29:06 4-5—the time was in reality about 2 minutes faster, according to the biograph men who had a watch on Morrison and claim he lost 4 minutes instead of the 2 he claimed—is one which will stand some beating another year. These are times for mountain climbing which are of the first class.

The road over which these records is made is thus briefly described by H. W. Alden, who climbed the road and won his class race: "Leaving Glen cottage the road makes two sharp turns and drops down 100 feet crossing the meadows. It is very sandy here for a quarter of a mile. Then it strikes into dense woods and begins to go straight up. The first pitch was very soft and had a lot of disagreeable water bars. There are as I found them 365 'thank-you-mams' from base to summit. It is a very hot place on a warm day, being on the east side of the mountain. There are several very bad turns and sharp rises of fully 20 per cent grade, with soft and sandy surfaces before the half-way house is reached. At the fourth mile point the timber line is passed and the road becomes gravel and harder. The fourth and fifth miles contain the hardest climbing. In the fifth mile there is one long lift up for 2,500 feet. Just above the sixth mile there is a short, sharp turn and a very soft 22 per cent grade. Just at the top of this follows a long 15 per cent grade, and at this point the contestants met with a lot of trouble. Further up the grades are not so bad, although

there are several quarter-mile stretches of 10 and 15 per cent, but by this time you get used to anything. All vegetation disappears at the 6-mile point, and nothing remains but rocks. Just before the finish a 3 per cent grade permits the survivors to make good speed. Altogether the road surface is not so bad as it might be, the grades are not impossible for a well-built car, but it is the number of them and the sudden turns that make the climb difficult."

All of the contestants claimed the going down was much more difficult than surmounting the hill. From now until the annual climb next year the makers will busy themselves with the designing of devices to increase the hill-climbing powers of cars in order that this, the latest stunt, may be made successful another year. Many who took part in the first year's contest gained experience which will prove invaluable to them in building cars, and many who did not take part wish now they had done so.

The hill-climbing contest to the clouds and the endurance contest lasting 2 days has convinced resorters of the practicability of the automobile; the residents have become interested; hundreds of motorists who have read of the trials are eager to see the country—so that another year, and even this season, the Mount Washington district may see hundreds of automobiles.

Next year there will be installed a more thorough and direct means of telephoning direct to the finishing point from any point en route, and other improvements in the methods of following the cars through their journey will be made. The officials this year worked by system, and their work was thorough and up to date in so far as was possible with the facilities at their command. The timing of the Chronograph Club of Boston was unexcelled and reliable in all ways. The other officials worked untiringly and to their hard work is due the success of the venture. Anderson and Price were also untiring in their efforts and the manner in which the district was organized for the endurance run was ideal in every way.

To all cars which successfully surmounted the hill belongs all credit and honor. The reputation gained this year will prove a strong selling point in the year to come.



THE PARADERS AT CRAWFORD'S HOTEL

UP TO SUN-KISSED MAHABLESHWAR

IN far away India an American runabout has achieved a success that has become one of the principal topics of discussion among the Indian motorists, and concerning which the local papers have made unusual reference. In May a party consisting of Dr. Tarachand, Mr. Rustum, N. D. Wadia, and Mirza, the mechanic, went to Khandalla and from there, in an Oldsmobile, began the ascent of the Mahableshwar mountain, one of the most difficult and picturesque climbs in India. The story of this upward journey is told in the Indian Sporting Times:

"At 2 a. m. the great G. I. P. steam motors landed the party at Khandalla and after a good tea, the car was brought out from its resting place, a feed of lubricating oil to the machinery and air to the tires and a toot of the horn declared the start. Four gallons of gasoline were carried in the tank, and four extra tins containing 10 gallons more, two tiffin baskets, a drop of Scotch, some water, a small portmanteaux, two spare tires, four tubes, spare batteries, lubricating oil, funnel, pump, etc., were loaded on the car.

"At 4 o'clock sharp the start was made from Barnett's hill. Poona was reached in 2 hours 15 minutes, a distance of exactly 45 miles. The first 6 miles from Khandalla were rather steep but part of the road was so good that the car did several miles at about 45 miles an hour. Nothing of consequence took place upon the road excepting that a young buffalo charged the motorists at the thirteenth mile stone from Poona, and it was not till efforts with two sticks and a good deal of tooting that the bovine was warned off. A little further on a string of twenty carts, with most of the drivers asleep, came on the scene, and at the blowing of the horn, ten deployed to one side of the road and ten to the other. The car was going at such a speed at the time, it being more or less down hill, that only careful maneuvering on the part of Mr. Wadia, who was driving the car, prevented what might have been a most nasty accident. Half an hour's halt was here made to cool the engine down a bit and the party reached Poona at 6:30 p. m. Here a bevy of admirers encircled the car near Cornaglia's, in East street, and evinced the greatest interest in the little runabout. At 7 p. m. dinner was served and after a thorough look over the car the party resumed the journey at about 9 p. m. The road to Mahableshwar was lost after about 10 minutes' run, and about half an hour was wasted in getting on to the proper track. It was a dark night and profiting by previous experience, the motorists were fortified with a strong acetylene lamp. A little pocket electric lamp was also provided to be able to peer into the internal mechanism

at night without danger of an explosion.

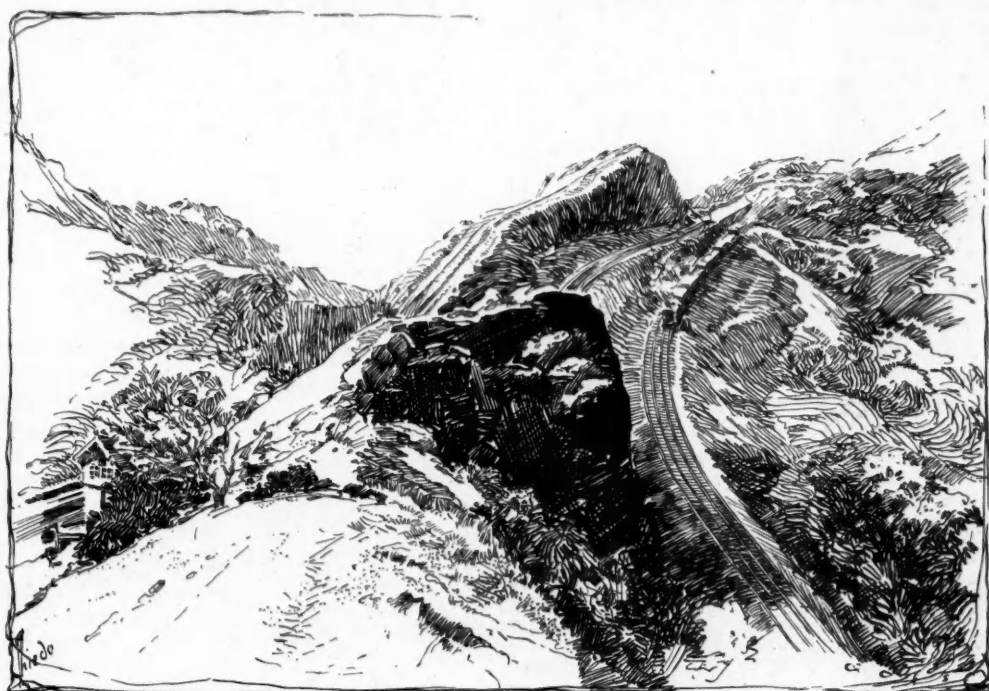
"Six miles from Poona the well known Katrej ghaut was reached and the little car went up the 4 miles of incline with three people and a lot of luggage without a groan. The top was reached and the huge tunnel was entered after exactly 1 hour's run on the Poona road. There was not a soul in the tunnel, but a large number of Hink's hurricane lamps were hung high, locked to staples on both walls of the tunnel. After resting inside for a while the wheels were sent round and the car headed for the Sherval traveler's bungalow, a distance of 32 miles from Poona. The party reached that place after a spin of 1 hour 15 minutes.

"A swarm of locusts had practically to be cut through while driving through the Shevapur garden, where the mango trees looked wierd with the luscious fruit hanging from the trees without a single leaf. On the way a large wild

"Up she went gamely and the top of the ghaut was reached in about an hour, but a mile from Panchgunni it became very hot and one of the tires, which had been pumped very hard overnight, punctured. This caused a great deal of disappointment and there was nothing for it but to go slowly up to the Panchgunni travelers' bungalow and wait for Mirza and the spare tubes.

"It was now 10:30 a. m. and old Sol's rays were beginning to make themselves felt to some purpose. The question was to stop or not to stop; and Dr. Tarachand decided, by electing to abide in the traveler's bungalow and take a rest till the sun had declined and meanwhile replace the punctured tire. Mirza and the *tonga*-load of accessories were crawling up the ghaut, and the wisdom of carrying extra tubes and other things which might be required in case of accident was demonstrated in the most emphatic

manner. Not very speedily, but surely, did the bumpy *tonga* appear on the scene and as Mr. Wadia was anxious to join his family at once he went on to Mahableshwar behind the toiling *tonga*—a rather less exhilarating mode of progression to that he had just quitted. Dr. Tarachand put in a solid rest and awoke to find that Mirza had inserted a new tube and reported the car to be ready to proceed. At 6 p. m. Dr. Tarachand mounted the car and the engine was soon singing merrily as the car mounted the remaining portion of the journey to Mahablesh-



THE BHOORE GHANTS CLIMBED BY DR. TARACHAND

boar was encountered and the car frightened several hares, some of which raced the car at great speed.

"Sherval was reached and here a small drop of Scotch with a bottle of the Khansama's soda was done justice to. Leaving the motor car in the garden the adventurers resorted to a well earned night's repose. Even here, with not a civilized soul around them, were four English women missionaries living in a bungalow, doing the good work of healing the sick and instructing the ignorant.

"At 5:30 a. m., after a good *chota hazri*, the engine was set in motion again and the 25 miles to Wai, including the ascent of the Khandalla ghaut, were done in 1 hour 15 minutes. This ghaut is fairly steep but the little car climbed nobly with the whole party on, excepting at two very steep parts, where Mirza had to lighten the burden by getting off. At Wai a good breakfast was put out of sight and with the inner man well fortified, at 9 a. m. the great ascent of the well known Pasarni ghaut, 8 miles long, was commenced. But before this great effort was embarked upon the car was divested of all its luggage, of its back seat and of Mirza, the mechanic, who came up in a *tonga* with the impedimenta.

war. There a hearty reception awaited Dr. Tarachand and there was a host of admiring friends who swarmed round the now passive machine which, with the pulse throbs of its tiny engine, had landed the adventurers on the top of the Olympian heights of Mahableshwar and thus accomplished what up to that moment had been regarded an impossible achievement except for cars of high horsepower. Lord Wolverton's car holds the record for being the first motor carriage to climb the summer capital of the government, and this last climb was looked upon as a marvelous feat. Experts were of the opinion that a car driven by an engine of under 5 horsepower was quite incapable of gliding up the Western ghauts. This theory was proved to be wrong when the Oldsmobile stole quietly up the Bhoore ghauts while the pale moon blinked and wondered at the daring of the motorists.

"The journey from Poona to Mahableshwar was accomplished in 6 hours and 15 minutes of actual running time, exclusive of stoppages, the distance being 74 miles. Taking the running for the whole journey from Bombay to Mahableshwar, 195 miles, the little car covered the distance in 12 hours and 50 minutes. The gasoline consumed was 6½ gallons."

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The capital stock of the Trade Press Co., publisher of Motor Age, has been acquired by Norton H. Van Sicklen. There will not, however, be any change in the business or editorial policy of the paper, which will be pushed vigorously along the lines which have been successfully pursued in the past.

PEN AND INK NUMBER

IT HAS been the persistent endeavor of MOTOR AGE to avoid commonplace and tiresome typographical appearance. A little variety is pleasing in all things, especially in a periodical of frequent appearance. This issue MOTOR AGE presents, as a relief from the almost universal use of half-tone illustrations, and as a means of giving a variety which is creditable as well as different, an exclusive pen and ink number.

The use of line cuts from drawings in place of the usual half-tones from photographs does not mean that the picturing of the news "stories" and articles is any the less truthful, for the pictures have been carefully drawn from photographs by the best newspaper artists in the west.

MOTOR AGE trusts this digression from ordinary procedure will be appreciated by its readers.

DEMAND YOUR RIGHTS

MOST people admit that automobilists have some rights—the few who do not admit this are not worth any considerable amount of worry.

The fact that legislatures, city and town councils and park authorities have passed laws, ordinances and rules to govern the use of the automobile on public highways is sufficient evidence that its right to the road has been admitted and established.

Although discrimination exists, it is supposed to be an unknown quantity in free America.

Today there is hardly a city that does not

boast a number of automobiles and a club of motorists—there are hundreds of automobile bodies whose province ought to be greater than conducting runs and races and furnishing an abode for story swapping.

It has been customary of late, when an obnoxious, unjust and discriminating measure is put upon the statute or ordinance book, to beseech the framers thereof to modify the strict terms of the measure.

This action on the part of individuals or clubs is not only wholly wrong but utter nonsense and tends to place the motorist in a wrong light and is practically an admission that the automobile has no rights.

This quibbling, this bending of knees to authorities might as well cease now as at any time.

The validity of an apparently unjust and unconstitutional measure ought to be fought out instantly—the status of the automobile may as well be settled this year as any time in the future, for it must be settled sooner or later by the courts, and a few quick blows now will do more good than a lot of heavy and costly slugging later on.

Motorists need not expect much from the "controlling" bodies—they're too busy on minor matters, and must drag their own cases through the courts.

Not a single unjust case should be passed: each and every phase of automobiling should be speedily determined, so that motorists, farmers, petty officials and all may know what is what.

The man who dares attack some of the existing measures in this country will be hailed as a hero, for the outcome is pretty well known.

Surely restrictions could be no more severe; surely any future legislation could be no more nonsensical. So what has the motorist to lose by sailing in and demanding his rights?

Why should one beg for something to which he is entitled? Why ask for something that is one's own?

If one has rights he can get them by demanding them; if he has no rights, let that be determined, and the sooner the better.

A JUST CHARGE

THERE has been some little criticism of the American Automobile Association because of its charge of a \$10 entrance fee for the St. Louis tour. This fee is an honest charge. That there is good reason for its being made is well shown by the following excerpts from a letter on the subject from the association:

The tour of the A. A. A. to St. Louis is not a money making institution. It is intended to be a gentleman's tour and the \$10 which we ask from the entrants is to be used entirely in the cause of promoting the tour. The expenses of the touring committee have been great and will be greater. Without going into all the details of these expenses, it is sufficient to say that they will be in the neighborhood of \$2,000. The committee figured that about 200 would enter and the entry fee was fixed at \$10. About a fifth have formally entered so far, but the touring committee knows of about 100 that are going to enter and it is probable that there will be at least fifty more.

The committee plans to give each entrant in return for his \$10, cards showing roads and running directions, two entry numbers to be placed on his car, guaranteed accommodations at adequate hotels, garage accommodations all along the line, and an immunity from license annoyances at St. Louis.

If the tourist becomes a formal member of the tour he is one of an organized party, whose name will be sent ahead, thus making sure that he will

secure good rooms and good accommodations for his machine. He will be registered at each night stop and on his arrival in St. Louis will receive the certificate of this association, a souvenir of the occasion, which might perhaps be desirable for him to keep. On the other hand, if he is not a formal entrant and has not paid his \$10 he is simply a camp-follower. Of course we cannot guarantee that such tourists will be provided for at the hotels or garages. Wherever there are official garages we must, of course, insure that those who have paid their \$10 are taken care of first.

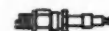
We have, of course, no control of the highways and cannot forbid any one following the confetti trail which our pilots will lay at an expense of \$200. But we are anxious to have the tour one large pilgrimage which will make an impression on behalf of good roads and on behalf of the automobile as an institution wherever it goes. We believe that there ought to be a personal pride on the part of every one who intends to go to St. Louis about this time in being "regular" and being formally entered, and we did not believe that the fact that it costs \$10 to do so would cause any one to hesitate for a moment at the advisability of it.

Our arrangement with the St. Louis authorities is to the effect that those tourists who carry our official numbers will need no other numbers on their machines. For all others, \$5 must be deposited, which will secure a special license number and tag and this must be fastened to the machine before it will be allowed to use the streets of St. Louis. We understand that a portion of this \$5 will be returned later, but the only way to secure the privileges in St. Louis without the annoyance of registration, etc., will be by carrying the formal numbers of the tour.

In view of the purpose and character of the tour it seems that the A. A. A. in getting participants into line at an entrance fee of \$10 is not asking any more than is right or any more than the service exchanged for the ten-spot is worth.



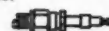
When the authorities of Evanston, Ill., raised the speed limit to 12 miles an hour it was thought the city's revenue would be cut down somewhat, but arrests go on as usual. The nice part of it is that the Chronograph Club of Boston is nowhere in matters of timing—Evanston's police have a system of their own.



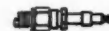
A Chicago alderman, defending his action in voting for the last effort of automobile legislation on the part of the Chicago council, stated that the council needed the money. An honest confession is good for the soul, 'tis said.



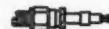
The distressing accident at Farmington, Conn., last Saturday, wherein a prominent Chicagoan lost his life, ought at least to teach motorists the lesson not to attempt high speed on unknown roads.



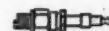
It must have reminded the Dutch settlers along the Hudson of old times to see so many Indians traveling along the banks of the big stream.



The Mount Washington hill-climbing contest taught a number of people a good many things they didn't know, some makers in particular.



Now comes the St. Louis tour, which will keep up the excitement for a few weeks to come at least.



Since the hill-climb the steam advocates have been beside themselves.

LITTLE NOVELTY IN NEW MOTOR LAWS

Need the Money?—At a recent meeting of the city council of Lafayette, Ind., it was agreed to tax motor cars and make it necessary for the owners to register and number them.

Names on Machines—The mayor of Covington, Ky., wants all local motor car owners to attach their initials to their machines. To that effect he has asked the city fathers to amend the ordinance. The speed limit in Covington is 8 miles an hour.

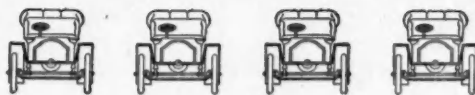
Three and Out—Recently the city councilmen of Sioux City, Ia., passed an ordinance whereby automobiles can be driven at a speed of 8, 12 and 15 miles an hour within certain sections of the town. Offenders will be punished with a fine of \$25 the first time and \$50 the second time. After repeated violations a license may be revoked.

Reasonable Restrictions—An ordinance was passed recently by the city council of Columbus, Ga. It stipulates that motor cars, motor bicycles and triecycles must not be driven upon the sidewalks. All motor-driven vehicles, including motor cycles, must be equipped with a bell or horn and with a lamp at night. It is unlawful for anyone to leave an automobile standing on the street with its motor in motion.

No Owls Wanted—At one of the recent meetings of the aldermen of Springfield, Ill., Dr. G. A. Hurllett suggested that no automobiles be permitted in Washington park or on the boulevards after 6 o'clock evenings and until 5 o'clock in the morning; that no one under 16 years old be permitted to drive a motor car, and that the speed limit of 8 miles an hour be more rigidly enforced. The resolution was adopted.

That's the Way—Three aldermen of Saginaw, Mich., were given a ride a few days ago by a well known driver of the town for the purpose of demonstrating and convincing the city fathers of the absurdity of allowing a speed of only 6 miles an hour. A measured road was chosen and the party went over it at a speed of 6, 8, 10, 12, 15 and finally 20 miles an hour. The three first runs did not enthruse the aldermen, but when driving at the 12 and 15 miles rate they seemed pleased. They at first objected to the 20 miles speed trial and after it was over claimed it was too fast. They favored a speed of 8 miles an hour in the business district and 12 miles an hour outside this section.

Changes in Canada—Some changes are being planned in the motor vehicle act of Canada. Heretofore automobiles owned by manufacturers and dealers, which were not used by them for their own private purposes or for hire, did not have to be numbered or possess a marker. It is now proposed that all vehicles shall bear a distinguishing mark, which shall be issued to each dealer. This mark must only be used upon machines being exhibited to intending purchasers or on cars which are being tested and while the vehicle is within 5 miles of the dealer's place of business. Formerly the mark became the property of the holder of the permit, but under the new regulation it is to be returned to the provincial secretary's department if the license is not renewed or if the vehicle is destroyed or if for any other reason the permit should lapse.



After Turnpike Grafters—Automobilists of Lancaster, Pa., formed the Lancaster Automobile Club last week. The principal object for the present will be to try to secure legislation whereby automobilists will be given the same privileges on the public roads as other users of them. The various turnpike companies of the country are now levying excessive tolls, to which the motorists have objected for a long time, but without avail. The matter will now be taken into the courts. Jacob D. Rider was elected president of the club; Dr. S. T. Davis, vice-president; Dr. E. B. Ilyus, secretary, and Dr. P. P. Breneman, treasurer. J. M. Matthews, of Lancaster; J. G. Usner, of Rothsville, and M. M. Hillegas, of Columbia, form the board of directors. At a special meeting of the officers of the new organization, it was decided to authorize the board of directors to employ counsel to petition the court to appoint reviewers to inspect one of the turnpikes to be selected by the board. If the turnpike selected by the board does not meet the requirements of its charter an injunction will be asked to restrain the owners from charging toll until the road is placed under proper condition.

Police Will Do the Violating—Two motor cars were recently purchased by the board of police commissioners of St. Louis, Mo., and will be exclusively used for catching automobile drivers who violate the speed ordinance. Until recently both the mounted and foot policemen had much difficulty in arresting offenders. The automobiles were purchased upon the suggestion of Dr. Faulkner, custodian of police properties, and are high-powered cars. Both are provided with speed gauges and will be occupied by a police officer and an experienced driver. The local papers in speaking about the innovation claim it will have beneficial results to all concerned.

Come to Chicago, Mr. Mayor—In several large towns either the councilmen or the chief of police have lately suggested that automobiles be excluded from running in the parks. Recently the mayor of Memphis, Tenn., made the following remark when asked for his opinion about the matter: "Memphis is the only city of any park pretensions in the country that permits the automobile the privileges of the parks. I personally deem them dangerous in the extreme when in the midst of a jam of carriages and on the narrow driveways of the park."

Has It All On—The automobile ordinance of Jackson, Mich., provides that motor cars must be registered and must be stopped if the driver of a horse-drawn vehicle signals to the automobile driver to do so. All cars must be equipped with a bell or horn and a lamp on each side of the car at night. Within a certain section of the town the speed limit is 7 miles an hour, while outside of that section cars may be driven at 15 miles an hour.

Usual Form—At a recent meeting of the city council of Stillwater, Minn., an ordinance was passed regulating the speed of motor cars at 8 miles an hour except at street corners and crossings, where the vehicles must reduce the speed to 4 miles an hour.

Want Protection—Taxpayers of Hatboro, Pa., have sent a petition to the borough council asking that motor cars be not permitted to drive at a greater speed than 8 miles an hour in the village.

York Road Speed—On the Old York road, within the township of Ogontz, Pa., the speed limit for motor cars has been placed at 12 miles an hour. At crossings the speed must be reduced to 7 miles an hour.

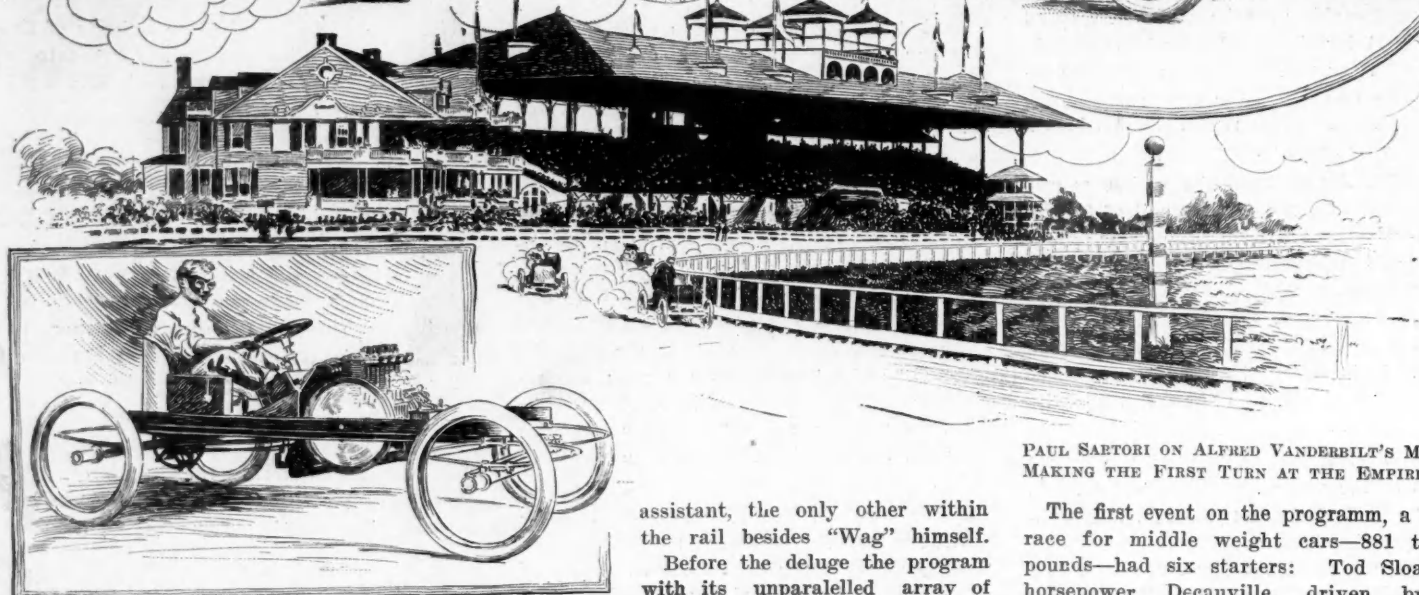
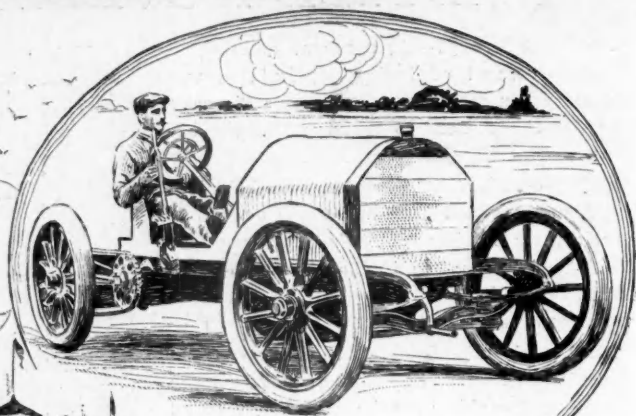
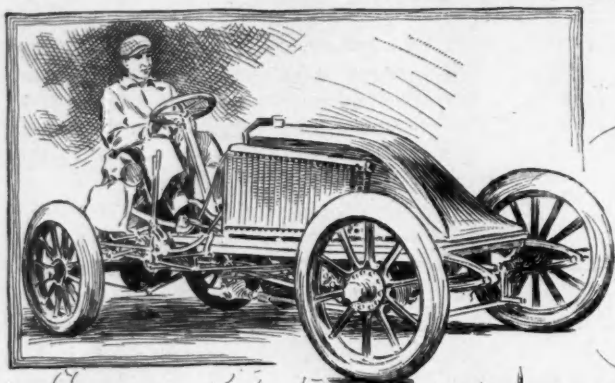
How Strange!—The market committee of Grand Rapids, Mich., adopted resolutions a few days ago urging that automobiles be prohibited from driving within the limits of the market because the farmers have repeatedly protested, claiming they scare their horses and cause runaways.

Very Enthusiastic—The new speed ordinance of Battle Creek, Mich., which was passed about a month ago has been so enthusiastically received by the owners of automobiles in the city that already nine out of sixty owners have taken out the required license. The councilmen are now considering some means to force the owners to get out their license without any further delay.

Bother the Court—According to local journals of Rockford, Ill., there were some sharp words exchanged during the debate concerning the automobile ordinance which came before the city council a few days ago. One journal claims that the sitting of the city fathers was much like a meeting of the French chamber or the German reichstag. The interesting part about the matter is that the proposed ordinance was passed against the advice of the Corporation Counsel Ferguson, who stated that according to the appellate court such an ordinance would be invalid. The vote stood eight in favor and six against, notwithstanding Mr. Ferguson's advice.

Humorous in Iowa—Since the new Iowa state automobile law went into effect there have been many dissatisfied automobile owners who have protested in some way or another. To James O. Crosby, of Garnaville, goes the palm so far because he mingles humor with his contempt for the ordinances. In the official document he described his car as follows: "Open buggy, spindle seat, black color, wire wheels, single tube tires, air cooling motor, looks like a little old-fashioned straw bee-hive hung in center in forward axle tree; two forward speeds; takes no step backward. Slow speed represented to be up to 15 miles an hour; fast speed up to 25 miles an hour; won't do either except down steep hills and on a level with a little nitroglycerin in the gasoline." Another interesting letter in connection with the ordinance was that of former Assistant Secretary of State Alexander, of Winterset, who wrote as follows: "Having very recently purchased an automobile and having observed that the legislature is about to legislate for the control of the same, I hasten to say that if you will inform me when you open your herd books I will immediately send you the breeding and pedigree of my machine. Cannot at this time give you the name of the sire, but can assure you it is damned by everybody that drives a horse or a mule." Until the end of the first week of this month 422 motor cars had been registered with the secretary of state.

TWO DAYS AT THE EMPIRE TRACK



M. G. BERNIN ON BROKAW'S RENAULT
W. F. WINCHESTER ON THE FRANKLIN

SATURDAY'S BRIEF PROGRAM

New York, July 16—A veritable cloudburst covering an area little more than the boundaries of the Empire City track that came during the running of the 15 miles for heavy weight cars, first in a gentle sprinkle, then in a smart shower, and wound up in a deluge that soon put the course through changes from quagmire to river stopped abruptly the record-breaking bee that was in progress after new figures had been set for middle and heavy-weight cars under the new international classification and caused a postponement until Monday afternoon.

Six thousand spectators, who had come by automobile, trolley and train, were turned away just as their appetites had been whetted for greater things to come. Yes, 6,000, and this in mid-summer, with the race track and sea beach counter attractions in full blast. A count of cars on hand is said to have made the number 560. There certainly was a big outpouring of them up Jerome avenue and they were packed back of the lawn, in the paddock and under the stand in great numbers, despite this being the season when very many car owners are supposed to be away at the summer resorts. There were faces everywhere of the racing enthusiasts and owners of crack speed cars who had run back to town for the meet.

The automobile turnout did not make the usual brave display on the lawn skirting the homestretch, for prudent Secretary Reeves would take no chances and had shut off the lawn to the brick walk by a wire, in front of which neither cars nor spectators were permitted. On the track Fred Wagner, of MOTOR AGE, the starter, was in sole charge, with his

assistant, the only other within the rail besides "Wag" himself.

Before the deluge the program with its unparalleled array of entries so far as variety, class and numbers went had progressed to the completion of the 10 miles for middle-weights, the 5 miles for Franklin stock cars and one heat for the heavy-weights.

This brief running resulted in basis for claims of records for the two classes so far as the new classification goes. In the 10 miles W. Gould Brokaw's 30-horsepower Renault, driven by M. G. Bernin, which spreadeagled the field at Brighton last autumn and performed well at the Ormond meet, scored 10:13 2-5. Comparing this with the former middle-weight records under the old 1,200 to 1,800-pound classification, it falls short of the 10:06 made by Barney Oldfield with the four-cylinder Winton Pup at Cleveland, September 4, 1903. Before awarding the middle-weight record to the Renault, it behooves Chairman Pardington to investigate the weight of the Pup at the time of the above performance, to see whether it comes within the present middle-weight classification.

A new set of figures under the new classification to replace those scored at the Readville meet was also created by Alfred G. Vanderbilt's 60-horsepower Mercedes, driven by Paul Sartori, which in the trial heat for the heavy-weight class—1,432 to 2,204 pounds—made 14:40 for 15 miles, as against Barney Oldfield's 14:21, when he drove the Winton Bullet at Denver, October 29, 1903. This 14:21 still stands as world's record for all weights and may possibly be the heavy-weight record under the new classification as well, if the Bullet was not raised above this limit by the alterations made in it after its return to this country following the Irish race. This again is a subject for the racing board to investigate and pass on, that the record table under the new classification may be started without dispute.

PAUL SARTORI ON ALFRED VANDERBILT'S MERCEDES
MAKING THE FIRST TURN AT THE EMPIRE TRACK

The first event on the program, a 10-mile race for middle weight cars—881 to 1,432 pounds—had six starters: Tod Sloan's 40-horsepower Decauville, driven by Guy Vaughn; W. Gould Brokaw's 30-horsepower Renault, driven by M. G. Bernin; H. H. Franklin Manufacturing Company's 10-horsepower Franklin, driven by W. F. Winchester; Walter Christie's 30-horsepower Christie, driven by the owner, and Oscar Lewisoh's 18-horsepower Mercedes, driven by M. J. Sullivan.

This race was an impressive runaway for the Brokaw flyer, which duplicated its fine spreadeagling performance at Brighton Beach last August. Before the 10 miles were over it had lapped the entire field, barring the Decauville, which it came within a hundred yards of reaching. The times it scored set new American figures for middle-weights under the new classification. The average was very close to a mile a minute. The time was 10:13 2-5.

The start was a pretty even one, with the Renault on the pole having a bit the better of it. Brokaw's flyer, however, took a decided lead before the first turn was reached, followed by the Decauville. At the end of the mile, which was done in 1:04 2-5 from a slow rolling start, the Renault led the Decauville by 150 yards, the Frenchman leading the 10-horsepower Franklin by 100 yards. The air-cooled American had the better of the Christie, the light-powered Mercedes bringing up the rear by the same distance.

This order was maintained through the race. In the fifth mile the Renault caught the Mercedes' target carrier, and at this point had increased its lead over the Decauville to half a mile. The next mile Bernin picked up more of the stragglers, but did not catch the little Franklin until the eighth mile. Setting sail for the Decauville, Bernin closed on Vaughn gradually, but failed in lapping him

by an hundred yards at the finish. The Decauville beat the Christie a third of a mile, with the Mercedes half a mile to the rear.

Three cars faced the starter for the first heat of the 15 miles for the heavy-weights—1,432 to 2,204 pounds. A. G. Vanderbilt's 60-horsepower Mercedes, driven by Paul Sartori, was on the pole. Another 60-horsepower Mercedes, owned by George Arents, Jr., piloted by Carl Mensel, was on the outside, with Guy Vaughn and the 40-horsepower Decauville between them. The trio were sent away on the second attempt to as pretty a start as was ever seen for an automobile race. The Mercedes pair showed their superiority from the start. Sartori took the lead, followed by Vaughn. In the backstretch, though, Mensel shot by the latter into second position. The run was a close one for the first mile, Sartori leading to the post by 50 yards and Mensel beating Vaughn by 35 yards. The time for the first mile from a slow rolling start was 1:02%.

Great doings were naturally expected. Sartori showed himself a clever track chauffeur. He put up quite a fair imitation of Oldfield's style of negotiating the turns, hugging the outside and shooting across to the pole at the curves.

At 5 miles Sartori led Mensel an eighth of a mile and was 12% seconds behind Oldfield. The Decauville at this point was the same distance behind the Arents Mercedes. At 10 miles Sartori led Mensel by five-eighths of a mile, with Tod Sloan's new purchase half a mile further to the rear. Sartori covered the thirteenth mile in 57% seconds, the fastest of the race. At the finish the Vanderbilt flyer led the Arents' crack by three-fourths of a mile, the Decauville being within a hundred yards of being lapped by the other Mercedes also. It is to be noted that Tod Sloan's car lost toward the end through a flat tire.

In a special race for Franklin cars at 5 miles a quintette started. Two of them, driven by A. F. Camacho and Harry Esselstyn, had a pretty scrap of it, the former at no time leading by more than 50 yards, and finally winning by 20 yards in 8:49%, with Charles Singer third, somewhat near a full-back.

FAST WORK MONDAY

New York, July 18—Rain during the night and in the early forenoon hours threatened a second postponement of the Empire City track races, but an hour before noon the sun came out and the drying out of the track began. It progresses so rapidly on this track that by 3 o'clock, the hour set for the start, there were signs on the surface of but few damp spots, though necessarily the foundation was soft, leaving the track far from its lightning-fast normality.

Despite its being "blue Monday" and a business day, fully a hundred cars made the journey to the track and at least 2,000 spectators were in the grand stand. There was much disappointment at the non-appearance of Harry Harkness and his Mercedes, which had lately won fame on the road between Boston and New York and last week on Mount Washington. He had personally signed an entry blank and was reported to be in town. The dashing young millionaire and his car were looked to to give the flyer of that other pampered child of fortune, Alfred G. Vanderbilt, a

close rub. But Harkness was non esse and the crowd looked to Brokaw's Renault to keep the heavier powered car well pressed.

There being but two cars to show up for the second heat of the heavyweight 15 miles—Nathaniel Huggins' 40-horsepower Decauville, driven by J. W. Hillyard, and W. Gould Brokaw's 30-horsepower Renault, piloted by M. G. Bernin—they were started forthwith in a final heat, with the three qualifying cars of the heat run Saturday—A. G. Vanderbilt's 60-horsepower Mercedes with Paul Sartori as driver; George Arents, Jr.'s, 60-horsepower Mercedes with Carl Mensel as pilot, and Tod Sloan's 40-horsepower Decauville, steered by Guy Vaughn.

"Wag" got them off to a pretty start, from which Sartori emerged in the lead, followed by the Renault and the Sloan Decauville, in order. The contest soon narrowed down in its early stages to a contest between the first two named. The Huggins Decauville quit at 3 miles and in this early stage of the running the Arents Mercedes was not being well handled. In the fourth mile, though, Mensel passed Vaughn and held Bernin at least. In the eighth mile it was seen that the Renault's rear tire had gone wrong, but Bernin would not quit and a smash up was dreaded each time he rounded a turn. Mensel began to gain and passed the reckless Bernin in the thirteenth mile. At last Bernin quit and let Tod Sloan's Decauville into third position.

Sartori beat Mensel $\frac{3}{4}$ of a mile, Vaughn finishing a mile and an eighth further back. Mensel's time for 15 miles was 14:42 2-5. Seeing a chance for some world's records, Secretary Reeves signaled Sartori to go on. He did, and wiped out the long-standing figures from 16 to 20 miles, inclusive, established by Henri Fournier with a Mors, at Fort Erie, Canada, September 26, 1901, cutting the 20-mile record from 25:25 2-5 to 19:37 1-5. Sartori's fastest mile was his second, run in 57 seconds, as against Oldfield's track record of :55 4-5 seconds, but great going considering the condition, just the same.

The great Empire handicap at 5 miles made the hit of the meet and caused the frequent comment that handicap races would tend to the all round popularity of the sport and encourage general participation in track contests. A. L. Riker and E. T. Birdsall did as well as could be expected for inexperienced handi-

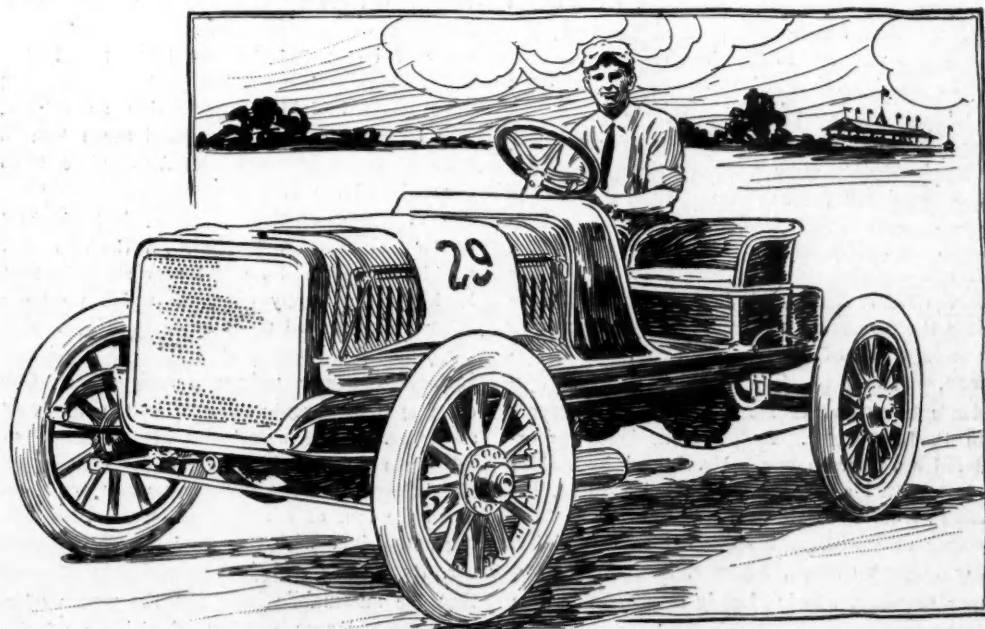
cappers, who had not made it a business to compile the records of the cars or study the practical distribution of allotments. Just before the start the too easily-persuaded handicappers raised the allowance of A. E. Morrison's Peerless from 70 to 110 seconds, and by just about this margin did the wily Bostonian win the race. Still the race was a rattling good chase from start to finish.

Six cars faced the starter in each heat. The handicap was by time. In the first heat the Homan & Shultz Co.'s 16-horsepower Rambler, Teddy Goodman; Joseph Cowan's 15-horsepower Panhard, D. Landau, and Wayne Kratzer's 10-horsepower Duryea had 85 seconds; H. E. Rogers' 24-horsepower Peerless, 70 seconds; W. F. Winchester's 10-horsepower Franklin, 50 seconds, and Nathaniel Huggins' 40-horsepower Decauville, J. W. Hillyard, 40 seconds. The Franklin won by 150 yards from the Decauville, which beat the Peerless 25 yards.

In the second heat Vanderbilt's Mercedes gave Arents' Mercedes 10 seconds, Brokaw's Renault 15 seconds, Tod Sloan's Decauville 40 seconds, and the Morrison Peerless, which appeared in touring rig, with the tonneau only off, 110 seconds. The Renault was sent away fully 15 seconds ahead of its time and won the heat by 150 yards, the Peerless beating the Arents Mercedes 50 yards. In this heat Mensel drove like a wild man, taking the curves at full speed. In the last mile the Vanderbilt Mercedes quit. It could easily be seen there was trouble. Investigation showed that it had run out of water, cracked two cylinders and was pretty badly wrecked as to its motor. It had to be towed back to the downtown garage.

This left Brokaw and Arents as back markers for the final. With the Renault started at its proper mark there was nothing in the race but the Peerless, which won by a third of a mile, the Renault beating the Franklin by 150 yards, with the Huggins Decauville fourth. The announced times for the first three were 4:52 2-5, 5:12 3-5, 5:16 2-5, which are equivalent to 6:42, 5:12 3-5 and 5:51 2-5 actual running time.

Two 1-mile record trials, with flying start, concluded the races. The Arents Mercedes scored 59% seconds and the Brokaw Renault, 59 seconds.



GUY VAUGHN ON TOD SLOAN'S DECAUVILLE

AFTERMATH OF THE CUP RACE



MUCH dissatisfaction has been expressed in continental automobile papers that the press was excluded from the meeting which was held after the Gordon Bennett race between the delegates of the different foreign automobile clubs. It has, however, leaked out that a proposition was presented by one representative urging that the governments of all countries adopt a law by which all automobiles of that country have a similar mark painted the same color. Herr von Bleichroder, a German banker and automobilist, offered a prize valued at \$2,500 for an annual international hill-climb contest. The prize was accepted by the delegates. A long discussion took place concerning the Herkomer prize, which was offered over a year ago by a Bavarian automobilist, and was to be an international trophy similar to the Gordon Bennett. The representatives of France, Germany and Austria spoke against the prize and President Baron van Zuylen of the Automobile Club of France is reported to have been especially emphatic in the matter, stating that the French eliminating race cost nearly \$200,000 besides requiring more than 5,000 men to guard the roads, which is an undertaking that cannot be done frequently nor will people be willing to undertake it often. All matters concerning next year's race in France will be discussed and decided upon at the December meeting.

According to a Berlin news agency, which claims to have received the information from a member of the German Automobile Club, the German club lost nearly \$45,000 on the James Gordon Bennett race, the total receipts amounting to only \$32,500, while the expenses reached \$75,000, of which \$23,750 was spent on the erection of the Saarburg stands. The club expected to make a profit out of the exhibition of the cars which took part in the race, but only one was sent to the show room.

In an interview with a Vienna journalist Mr. Jellineck, of the Daimler Motoren Gesellschaft, said: "France has won; but only in the race, not from a business standpoint. Do you know how many cars I have sold since the race? Twenty-four to Belgium, twelve to Holland, and 150 to England. The car which Baron de Caters drove has been bought by Baron Henri Rothschild, Jenatzy's car has gone into the possession of Mr. Dinsmore, his reserve one into that of another American, Mr. Harryman, Braun's to Herr Theodor Dreher, Warden's to a German named Kas, and Kerner's to C. L. Charley. Prince Hohenlohe has ordered a 90-horsepower. Mr. Lionel Rothschild also wanted a similar one, but I refused, because I do not sell cars of that power to a young man without the consent of his family. My biggest success, however, is that the German emperor, who is already in possession of a Mercedes, ordered a 40-horsepower for himself immediately after the race. As I have al-

ready said, victory would not have profited us to a greater extent, nor, on the other hand, does the victory of another car do us any damage. Our position in the international market could undergo a change only if the quality of our wares fell off, and that certainly will not happen. We shall maintain our position. What did the amusement of the race cost us? Oh, the trifle of \$65,000. Yet it would have been considerably higher if we had not sold all the racing cars. Next year we shall try and win back the trophy, provided that we come to an understanding with the automobile clubs of Germany and Austria. If the German club, in its aim at international equalization of rights, desires to make sure of our help, it must give us all the means to succeed—all or nothing. Ours is the only factory in Austria likely to bear the expense of the Gordon Bennett race, so that we should then go to France with half a dozen cars. For us, as I have said, there is no business interest at stake, but we should like to win the trophy once again at least, if only for the honor of the flag. If up to July 15 the German club would commission us to represent the German colors next year we would produce a car that would astonish the sporting world. Hitherto we have not really built a racing car. Even the fast 90-horsepowers can be turned into capital, comfortable, lightly-steered touring cars; but next year we will build the first racing car; it shall run in the race only, and then, with the exception of the exquisite motor, be thrown on the scrap heap."

Englishmen, while disappointed with the showing made by the British cars in the race held in Germany, have already begun making plans for next year's contest. It is reported that the Wolseley company has sent its inscription as a competitor to the Automobile Club of Great Britain and Ireland and that S. F. Edge and Baron Leopold de Rothschild have made individual application as drivers. The latter's entry has caused much talk in automobile circles and the Automobile Club Journal had the following note concerning the matter in a recent issue: "Mr. de Rothschild is the first amateur to enter for the cup with a Siddeley car, and we feel very strongly that he has set a happy example, which we trust other members will make haste to follow. After all, under its present conditions the international cup is purely a racing event. Our chief sporting events are still in the hands of amateurs. Those who breed horses merely to sell them do not chiefly figure as winners of classic events of the turf, and when one compares the cost of a racing automobile, its tuning and driver with the cost of a Derby winner, its trainer and jockey, one sees at once that the automobile is within the means of a very much larger number of citizens of the British empire than a horse. Therefore, we

again express our hope that many members will follow Mr. de Rothschild's happy example, and we are sure that manufacturers will be exceedingly glad to be relieved of part of the burden with which the race loads them. May the blue and yellow be as successful on the road as on the turf."

The reception accorded Thery and Brasier when they returned to Paris has had no like since the visit of the czar of Russia several years ago. It was a national event, according to the Paris papers, and the public never showed itself so enthusiastic even for the president of the republic. The house of the Automobile Club of France was decorated, and it was estimated that from 30,000 to 50,000 people were gathered in front of the house on the immense Place de la Concorde. Many speeches were made, the most interesting being the one by Max Richard, president of the automobile board of trade which was as follows: "It is with an emotion not less intense than joyous that I speak a few words, as friend, as member, but especially as president of the Chambre Syndicate de l'Automobile, in order to express to you by word of mouth the universal congratulations that all would like to shout in a burst of sympathy and gratitude for the great victory that you have achieved. What a burden you took up, and what a task you undertook! And in what feverish anxiety we have awaited during the days you were preparing for the struggle! For the strife was big with consequences from every point of view; and when the result was made known to us there was a veritable explosion of joy—a truly national joy. I do not know to which of you should be addressed the most fervent congratulations—whether to the maker of this admirable weapon, or to the soldier whose ability and impeccable coolness have so wielded it that it has fulfilled the dream of the maker—but we admire and congratulate both the men who have united to gain this victory. This is not the time for a long speech; we are here only to give you, if I may express it, the kiss of welcome. It is expected that in a few days we shall have a large gathering—a banquet, where all your admirers may come and express to you their sentiments of gratitude and friendship. I drink to the success of Thery and the Richard-Brasier automobile!" In turn M. Brasier responded, saying that he would do his best to keep the cup in France next year. The procession left the club and passed down the main boulevards where the sympathetic crowds greeted them. Paris may indeed be proud of the reception it has accorded to its automobile heroes.

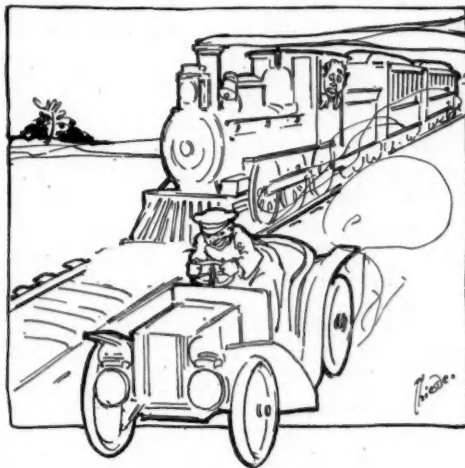
The banquet offered by the Automobile Club of France to Thery and Brasier was in many respects a memorable event. It took place July 7 in the large banquet hall of the beautiful club house at the Place de la Concorde and seldom have so many prominent persons, be-

longing to the automobile trade and sport, been gathered at the club.

President van Zuylen was the first speaker and in a brief history of the James Gordon Bennett cup race spoke of the increasing difficulties encountered each year and the greater merit of the winning team. Max Richard spoke concerning the tremendous interest taken in France in the great race, the exciting scenes which took place during the early hours when the result was yet in doubt, but when They was already in a leading position, and finally the enthusiasm of Paris and the whole of France that afternoon when the result was officially given out. Marquis de Dion spoke concerning the daring mechanics and his speech was much cheered. The representative of the minister of commerce was the next speaker and said that for some special reasons the decoration of the legion of honor could not be given to Brasier just now. He added, however, that he would receive it at the time of the next automobile show. Charron then spoke, briefly explaining the reasons of the public subscription which the C. G. & V. Co. had started, and his remarks were greeted with unanimous approval. Marquis de Chasseloup-Loubat, Michelin and a few others also spoke. Brasier made one of the last addresses and thanked the club for the brilliant reception given him, They and the mechanics. He spoke about the race, the preparation his company had made and the expectation and confidence he had in his car. He also said that it was not just to neglect to associate the manufacturer of the tires with the success. The subscription for the purpose of offering They a souvenir in the shape of an art object was closed the day before the banquet and amounted to nearly \$2,250. Manufacturers, dealers, sportsmen, newspapers, trade

journals, foreign and native admirers, sent contributions which ranged from \$200 sent by James Gordon Bennett down to 5 cents from "a young admirer who is not very rich."

About thirty English motorists, including the Duke of Sutherland, president of the Automobile Club of Great Britain and Ireland; Colonel Holden, chairman of the club; Earl Russell, J. Scott Montagu, Mark Mayhew, C. Jarrott, S. Girling, S. F. Edge and C. Cordingley gathered at a dinner which was given in the club's dining room July 5, in honor of the manufacturers and drivers of the British Gordon Bennett team. There was naturally neither the enthusiasm nor the number that marked the French banquet, but the gathering was cheerful and indicative of hope for the future. Alfred F. Bird, chairman of the race committee, announced that the club had determined to send a challenge for the 1905 cup race at an early date, and that S. F. Edge and Lionel de Rothschild had both entered cars with the club to enable the challenge to be backed. Harry Aus-



tin, of the Napier company, responded and spoke on the great difficulties which confront British manufacturers in producing racing cars and especially in testing them. Major Lindsay Lionel spoke concerning the drivers and was especially gratified that only drivers of English birth drove the cars, and suggested that the club make it a duty to always choose natives of the land. He expressed surprise that the press had hailed and gone almost wild over the fact that twelve out of eighteen cars had finished the great race. He did not consider this achievement so conspicuous. S. F. Edge took up the remarks and said that if the major knew that it took 7,431 pieces to build his racing car, and that among these pieces a great many were themselves made up of several other pieces, the fact that twelve out of eighteen cars finished should be considered a rather remarkable achievement. He also said that it required fully 3 months of continuous driving to get well acquainted with the car and the road. The English law does not give a driver a chance to train. S. Girling spoke concerning the drivers and concluded by apologizing for not having made a better showing in the race. He certainly hoped to do better the next time. C. Jarrott in a few words said that the results of the cup race ought not to discourage, but rather to enliven British manufacturers, who should keep the cup in mind.

L'Automobile, of Paris, has opened a subscription in order to offer a few hundred francs to each of the French mechanics who took part in the James Gordon Bennett cup race. Paul Sencier, editor of the paper, in an editorial, claims that much injustice is done by not associating these workmen with the drivers, inasmuch as they are of just as much importance in a race as the men at the wheel.

LITTLE STORIES OF TOURING

TOURING WESTWARD

Boomhowe brothers, of Chicago, have been spending the past week at Syracuse, N. Y., after having made a trip from Boston to Syracuse in 2 days. The first day out they made Albany and the second Syracuse. Friday morning they started from Syracuse back to Albany, on their way to Boston, preparatory to making a trip as far west as Buffalo and through the southern part of New York state. The two young men are traveling in a car of their own make and equipped with a 14-horsepower motor. The car weighs 1,750 pounds. In place of the tonneau the travelers have a platform over the rear axle, on which they carry trunks. During the past 4 months they have made over 3,000 miles, principally through the New England states. The roads in New England are far superior to those in New York state. The worst roads they have encountered thus far were between Utica and Syracuse. They will soon start on a trip to Chicago.

TUMBLING TOURING TIMES

Great efforts have been made recently by different enthusiasts in Southern California for the record between Los Angeles and Santa Barbara. Norman Church was the first one to make a record between these two cities, making the trip about 3 weeks ago in 6 hours 26 minutes, elapsed time. This was considered a fine performance until John McLain and Leon T. Shettler, both from Los Angeles, made the run in 5 hours 35 minutes. A few days

ago Colonel H. T. Lally, of San Francisco, went out for a trial in a Winton car and managed to clip off 14 minutes from the former mark. It is generally believed that before the end of the season the record will have taken a few more tumbles, as the road is a fine one and motorists like it for record attempts.

BAD MISSOURI ROADS

A party of motorists from Kansas City, Mo., which went to the fair in St. Louis, Mo., reported that the roads were in the worst imaginable condition and that they had a great deal of mishaps. They arrived in St. Louis almost 48 hours behind scheduled time and complained bitterly at the fact that the authorities do not give more attention to keeping the roads in shape. Many times it was necessary to get mules to pull the cars from the deep mud.

FOUND BAD ROADS

Bound from New York city to Minneapolis, Minn., in an automobile, Philip Brooks, of the latter city, and Sydney Kennedy, of Brooklyn, left Syracuse Thursday morning. Robert J. Grant, a classmate of Mr. Brooks at Yale, accompanied them to Rochester. The two men left New York Monday in a 60-horsepower Columbia. It was one of the largest machines ever seen in Syracuse, having a seating capacity for seven persons. Mr. Brooks found the roads between Albany and Syracuse bad, and unless there is improvement farther west he declared that he had no idea as to when he would arrive at his destination.

OUT FOR 2 DAYS

Twelve cars belonging to members of the Rhode Island Automobile Club left the Crown hotel, Providence, Sunday afternoon for a run of 2 days. Through the invitation of Earl P. Mason, of Newport, the members visited that city. Although Newport is only 30 miles from Providence, the courtesy of Mr. Mason makes a trip back the same day unnecessary, and all of the members remained at the Aquidneck house for the night. Outside of the city the members were met by a delegation from the Newport Automobile Club and were escorted to the hotel, but dinner was served at Mr. Mason's quarters and at his expense. Sunday the party on the trip went across Narragansett bay by ferry to Jamestown, across Conanicut island to a ferry, which took them to Saunterstown. Here the return trip began, which was along the west shore of the bay. Some of the members went to Narragansett pier, but the greater number returned to Providence.

OUT ON LONG TOUR

A 1,000-mile tour was started recently by motorists of York City, Pa. Four cars conveying nearly twenty passengers started for Atlantic City and expected to make the run in 8 days, taking plenty of time to see the country and visiting the many towns and cities through which they would pass. Each day a new pacemaker was appointed, and the rate of speed was such that all the cars were kept well together during the entire trip across Pennsylvania.

DEATH FOR CHICAGOAN

C. D. Rogers Thrown Against Tree While Touring, Skull Fractured and Death Results Later

Hartford, Conn., July 18—The most horrible motor car accident to occur in this section was that of Saturday, when Charles D. Rogers, of Rogers & Co., printers, Chicago; Louis Caswell, formerly of Hartford, but now with Hayden Eames, of Cleveland, and W. G. Murray, of Chicago, lost control of a new Peerless car while running between Plainville and Farmington, plowing into a tree while going at a rate said to be 20 miles an hour, and sustaining injuries from which Mr. Rogers died today. He had a fracture extending all across his forehead, upon which Dr. O. C. Smith, Dr. Harmon G. Howe and Dr. Willard, of Hartford, and Dr. Morrissey, of Unionville, operated for trephining to relieve the pressure of the skull on the brain. Caswell's injuries were in the back and side, an abrasion as large as a water pail standing from his left side, while Murray suffered some bruises, but was not badly hurt.

Rogers had lately received the big four-cylinder Peerless in New York and in company with William C. Thorne, a prominent Chicago motorist, was making a tour of New England. Thorne and party were about a quarter of a mile behind in a big Columbia four-cylinder car driven by Bert Holcomb. The party had dined at the Country Club in Farmington and had taken a run down to Southington, 15 miles removed. Returning, Rogers led the way, the Thorne party remaining behind to avoid the dust. It was agreed that a moderate pace be kept. While running between Plainville and Farmington the rear wheels of the Peerless car struck the grass-grown tracks of an abandoned trolley line and the car skidded. Before it could be straightened out the car had run down a large tree. Caswell in the tonneau was pitched over the car and landed against a three-rail fence in front. Rogers received a slantwise blow against the forehead, coming in contact with the tree. The car was demolished.

In less than a minute Thorne's party overtook the injured men and brought them to the Elm Tree inn about a mile distant and medical aid was summoned. Rogers was unconscious, while Caswell and Murray were able to explain the accident. Three trained nurses were in attendance.

To the representative of MOTOR AGE, William C. Thorne made this statement: "Mr. Rogers arranged the day before to make the trip with W. G. Murray and Louis Caswell. He ran to Southington and there turned about intending to return to Hartford through Farmington and Avon over the Talcott mountain Albany road. Since the road was dusty my Columbia car, driven by Bert Holcomb, stayed about a quarter of a mile behind to avoid the dust of the party in front. At the time of the accident we were running 18 miles an hour and had the preceding car well in view until a turn in the road hid them from sight. It was at this time that the accident occurred."

BECONNAIS KILLED

Beconnais, the well known French driver, and his mechanic, Julien Bernard, were killed July 3, on the Bordeaux road near Bayonne, in southern France. The accident was caused by the sudden bursting of a tire, which caused

the 100-horsepower racing car in which they were riding to skid and run into a tree that was nearly uprooted by the shock. There were no witnesses to the accident, but a few peasants who happened to be in a field several hundred yards from where the tragedy occurred heard the bursting of the tire and a few seconds later the noise of striking the tree. They ran to the spot and found both men dead. Both skulls had been fractured and Beconnais had also a broken arm. The machine was almost undistinguishable. The motor was found 10 yards from the chassis, while the radiator was 30 yards away on the other side of the road.

Beconnais was among the most popular sportsmen in France. His first success dates back to the time when he was one of the bicycle champions. In 1899 he won the 100-kilometer championship of France. In 1900 he became a motor tricycle enthusiast and won almost every important event in which he competed. At the time of his death he held the hill-climbing record for this class of machines, over the Turbie road, this record having been established in 1900. On the road from Nice to Marseilles he repeatedly went faster than many of the heavy racing cars. Recently he had only driven over short distances, the mile and kilometer being his preferred marks. The last time he took part in a race meet was at Arras, in June, when he established a world's record for voituresses in the mile standing-start competition. He covered the distance in 1:00 1-5, on a Darracq racer. A few days later on the same car he made the best time in the kilometer hill-climbing contest by covering the distance from a standing start in :47 1-5.

CHICAGO'S CARTER SIGNS

Chicago, July 20—Since Tuesday, July 19, the automobile ordinance passed by the city council of Chicago by a vote of fifty-nine in favor and seven against, at its regular weekly meeting of July 11, has become a local law, Mayor Harrison having signed the ordinance.

As reported in last week's issue of MOTOR AGE, the maximum speed permitted is 10 miles an hour, and an amendment was added to the ordinance providing that when turning a street or alley corner the speed must not exceed 4 miles an hour.

Concerning the numbering provision it has been decided that aluminum number plates, backed with 1-16 of an inch of armor steel, are to be issued to all licensed motorists. A charge of \$1 each is to be made for the plates. The figures are blown into the metal and will be 5 inches high. Each plate bears the name of the city of Chicago and is supposed to entitle the holder to license privileges in all other cities.

FISHER JUMPED

New York, July 14—While Orlando Weber was driving the Pope-Toledo Vanderbilt cup car in practice this afternoon at the Empire track, with John T. Fisher, its regular driver, as a passenger, in rounding the far turn at high speed the outer fence was neared. Weber sought to avoid a collision and gave the wheel a sudden twist. The steering rod broke, and the wheel spread, throwing up a great cloud of dust, at which Fisher jumped and dislocated his ankle. Weber retained his seat and brought the car to a standstill without further trouble. Fisher had been driving the car in practice in 58 seconds, but on this occasion had permitted Weber to run it.

MILWAUKEEANS FIGHT

Club President, a Minister, Camping on Trail of Alderman Who Have Numbering Ordinance

Milwaukee, July 18—The president of the Milwaukee Automobile Club is a minister of the gospel, but that fact will not temper the fight which the club is about to make against the passage of an ordinance requiring the licensing and numbering of automobiles and resistance of the measure if it becomes a law. The president's name is J. F. Szukalski and his machine may be found at the city hall curb every time the aldermen get at automobile legislation. Time and again he has told the council committees that the organization he heads will not stand for the proposed regulation and his forceful, sincere arguments have deterred radical ordinance provisions which were demanded in the infancy days of Milwaukee motorists. The clerical president was very plain in his declarations that the world moves and that a city and a people must do the best they can in keeping pace with it. Because there were no automobilists traversing the Indian trails of this locality a half century ago, the preacher said, was no reason why their owners should be subjected to unreasonable and discriminatory restrictions and requirements in this day of grace and progress. The reverend gentleman does not hesitate to stop his machine at the door of the lowliest and most wretched hut in the congested districts and he rejoices in the fact that his up-to-date means of traveling enables him to call oftener upon those who hail his coming with delight.

When asked by the correspondent of MOTOR AGE to state why he so earnestly opposes the licensing and numbering of automobiles he replied: "The members of my club refuse to wear tags. We are opposed to being made victims of class legislation, for we consider that we have fully as many rights as other American citizens. Such precautions are no more needed for automobiles than they are for a horse and buggy. It is often pointed out to us that such an ordinance is in force in Chicago. All I can say in regard to that is that the conditions existing in Chicago are a farce. There are about forty motorists there who, having secured injunctions from the courts restraining the enforcement of that part of the ordinance which requires numbers on their machines, are not required to have the numbers, while all the others must have them or be arrested."

Mr. Szukalski says the Milwaukee Automobile Club has appointed a special committee, which has been clothed with full power to act in the premises which form the subject matter and that machines will not be numbered in Milwaukee until the supreme court of the state decrees that such a procedure is constitutional and within the legislative powers of the common council.

REGGY'S SWELL MEET

There will be some hot sport on Second Beach, Newport, R. I., on July 30 if all the plans of Reginald C. Vanderbilt, who has become a race promoter, are carried out as he has arranged. The Newport Amusement Association, an organization of wealthy residents of this famous watering place who are always busy with some plan for driving away that

tired feeling sometimes prevalent among the cottagers, will be responsible for a series of races arranged by Mr. Vanderbilt. There will be six events on the program, and they take in all kinds of cars. Cups as prizes have been offered by the millionaire manager and by Alfred G. Vanderbilt, Clarence W. Dolan and the association. The program is as follows:

First race—Open to all motor cycles; silver bowl, valued at \$75; entrance fee \$5.

Second race—Open to locals, electric machines; silver cup, valued at \$100; entrance fee \$10.

Third race—Open to locals, gasoline cars not exceeding 10 horsepower, raced in road condition; silver cup, valued at \$100; entrance fee \$10.

Fourth race—Open to locals, gasoline cars exceeding 10 horsepower and not exceeding 24 horsepower; silver cup, valued at \$100; entrance fee \$10.

Fifth race—Open to all gasoline cars not exceeding 24 horsepower; silver cup, valued at \$100; entrance fee \$10.

Sixth race—Open to all gasoline cars exceeding 24 horsepower; silver cup, valued at \$150; entrance fee \$10.

The term "locals" refers to permanent and summer residents of Newport, Narragansett pier and Jamestown.

ANOTHER GLENVILLE MEET

Cleveland, O., July 19—The Cleveland Automobile Club has announced the program of the different races which will be run at a 2 days' meeting to take place August 19 and 20 at the Glenville track.

This will be the third annual race meet and no efforts are being spared to make the event even more successful than in previous years. It is expected that many of the best known professional drivers will take part in the races.

The rules adopted for classification are those of the A. A. A. and first prizes only will be given in the contests.

The principal events on Friday, August 19, will be: Two-mile race for stock runabouts; 2-mile race for electric vehicles; 5-mile open for stock touring cars, stripped; 2-mile race for motor cycles; 5-mile open handicap, standing start, with $\frac{1}{4}$ -mile limit; 100-yard obstacle race; 5-mile manufacturers' challenge cup race for the Diamond Rubber Co. cup; record trials.

On Saturday there will be run the following: One-mile race for vehicles weighing from 881 to 2,204 pounds; 5-mile race for electric cars; 5-mile race for touring cars with full road equipment, and carrying three passengers, in addition to the operator; 10-mile open handicap; 5-mile handicap for motor cycles; 5-mile race for standard touring cars; 10-mile open; record trials.

Application blanks can be secured from the Cleveland Automobile Club or of Secretary George Collister. The entry fee will be \$5 for the first event and \$1 for each additional event.

SHOW FOR MILWAUKEE

Milwaukee, Wis., July 17—The Milwaukee Exposition Co., a concern that has been giving industrial expositions of state-wide interest, has decided to forego that enterprise this fall and the directors are talking seriously of giving an automobile show instead. The company has control of the exposition building, one of the largest auditoriums of the northwest, and if an automobile show is decided upon it will be given upon the broadest scale. The executive committee will pass upon the matter shortly. Local dealers in automobiles will co-operate with the exposition management in case an automobile show is decided upon.

NEW HERRESHOFF CRAFT

Forty Footer with 40 Horsepower Motor to Make 24 Miles an Hour—Boating on St. Lawrence

An automobile boat which has a great many original features was put into the water at Providence, R. I., Saturday, its owner and builder being the Chase Pulley Co., which has been in the business of constructing these boats for some time. The craft was designed by Charles F. Herreshoff, of New York, who built the fast sloop Nevada, which was so successful in European waters. The craft is 40 feet over all, 37½ feet on the water line, has a beam of 4 feet and 8 inches draft. It is made almost entirely of mahogany and every detail has been looked after with the greatest care in order to have it as near perfect in construction as any boat of its kind afloat. Mr. Herreshoff, who is not connected in a business way with the great Herreshoffs of Bristol, of cup-defender fame, not only drew the lines of the craft but also built the engine, which is a four-cylinder, four-cycle affair capable of developing 40 horsepower. It is built compactly, and Mr. Herreshoff says it weighs less per horsepower than any other marine motor in existence. It is made to send the boat through the water at a speed of 24 statute miles an hour, and is connected with a 2-foot, two-bladed propeller, which will make 900 revolutions a minute. There are three cockpits in the boat, and as there are special arrangements made in the forward cockpit for steering, these have been patented by Mr. Herreshoff. The turtle deck forward is 12 feet long and is made of mahogany.

A meeting of the motor boat enthusiasts on the St. Lawrence river about Thousand islands was held at the Columbian hotel at Thousand Island park July 13. The purpose of the meeting was to form an association to promote racing during the summer months. The promoters are Ernest Serell, owner of Zaza; E. E. Campbell, owner of Radium, and Louis Hunt, who owns Roma. A large number of the motor boat men were in attendance. Handsome motor boats are very much in evidence these days on the St. Lawrence river and especially about Ogdensburg and Alexandria bay. The 40-foot launch Mignon, formerly owned by Dr. E. E. Campbell, of Alexandria bay, and recently purchased by Nathaniel Hunt, of St. Elmo's Isle, was taken to Clayton by Edward Campbell and shipped to Detroit. J. S. Zimmerman, of the Zimmerman-Nixon firm of theatrical managers and proprietors of the ill-fated Iroquois theater at Chicago, is at Alexandria bay with his yacht Hironde, having cruised from New York city. The new launch of Dr. E. E. Campbell, Radium, has recently been fitted with a 32-horsepower engine. In a time trial for speed the boat is reported to have made 21 miles an hour. With a view of increasing the speed the rudder was placed on the bow, an innovation which has justified the owner's belief in the practicability of the change. The handsome private yacht Regina is attracting more attention at the bay than any other. It is occupied by the owner, Samuel L. Clayton, of Philadelphia, a nephew of the late United States Senator Powell Clayton, from whom the village of Clayton in the Thousand islands took its name. Mr. and Mrs. Clayton

went by way of the Hudson river and the Erie and Oswego canals to Oswego, direct from Florida and the Bahama islands, where they spent the winter. They will spend the summer at the bay in their yacht, taking frequent cruises to Toronto, Montreal and other points.

Mr. Clayton declared that 2 weeks ago the weather at Oswego was the coldest he had experienced in 10 years, the temperature being 52 degrees. Everything in his palatial yacht is suggestive of a tropical climate, including a number of pet camelions from Florida. Last summer Mr. and Mrs. Clayton shot the St. Lawrence rapids under the guidance of three Indian pilots. They claim the distinction of possessing the only yacht that has ever made the perilous trip. Regina is 60 feet long, 10 feet beam, and is fitted with an 80 horsepower engine.

At a meeting of the executive committee of the National Association of Engine and Boat Manufacturers, held at the Hotel Manhattan, New York, Friday, the following officers were elected for the ensuing year: President, John J. Amory; vice-president, H. A. Lozier, Jr.; second vice-president, J. N. Schoonmaker; third vice-president, Henry R. Sutphen; treasurer, J. S. Bunting; secretary, Hugh S. Gambel. The names of the members who will serve on the various committees will be announced by the president in the near future. The meeting was well attended, the following members of the executive committee being present: John J. Amory, H. A. Lozier, Jr., J. N. Schoonmaker, H. R. Sutphen, J. S. Bunting, C. L. Altamus; E. A. Riotte, A. Massenet, A. Snyder, A. E. Eldridge, H. R. Sutphen, H. Newton Whittlesey, by proxy J. S. Matthews, J. B. Smalley, C. L. Snyder, H. T. Brautigan. Several matters of interest were taken up and discussed, among which was that of the national show. A committee of two was appointed to look into the matter and report at the next meeting of the executive committee. This association has now upwards of fifty members, both active and associate, representing the leading manufacturers of engines and boats, as well as accessories.

COMPOUND GOES ABROAD

Middletown, Conn., July 18—W. H. Ketto, of the Eisenhuth Horseless Vehicle Co., maker of the Compound gas car, sailed for England Saturday, taking with him one of the company's cars, which will be used for purposes of demonstration in London. The car is of 12-horsepower rating and designed to sell for \$2,000. In the factory test the car ran from Charter Oak park, Hartford, to Middletown, 19 miles, in 31 minutes. The Eisenhuth people, who occupy the splendid plant of the old Keating wheel works, claim to have sold a number of cars abroad. The plant is now in full operation, a large number of men being employed in making cars to fill orders in this country and abroad.

WILL MAKE AUTOMOBILES

Milwaukee, Wis., July 17—The Merkel Mfg. Co. is the name of a concern just incorporated with a capital stock of \$200,000 for the purpose of manufacturing a water-cooled motor for automobiles. President Merkel says operations will be commenced shortly with a force of about a hundred skilled mechanics. A number of new devices will be features of the new machine, but of them the company will give no description at this time.

FOUR INDIANS IN FIRST

Motor Cycle Endurance Awards Made by the Committee After Complete Checking is Finished—Almost Perfect Scores are Recorded by These; While Others Show Well

After examination of the checking sheets at the various controls and tabulating the results of the several separate tests which formed part of the Federation of American Motorcyclists' 6-days' endurance contest, July 2 to 7, the referee and committee in charge has announced the following awards: In the complete series, comprising all tests and the run from New York to Albany and return and from New York to Cambridge, Md., the highest possible score was 1,317 points. The award was as follows: Diamond medal, George N. Holden, Springfield, Mass., 1 3/4 Indian, 1,310 points; silver medal, Fred C. Hoyt, Springfield, Mass., 1 3/4 Indian, 1,309 points; bronze medal, Oscar Hedstrom, Springfield, Mass., 1 3/4 Indian, 1,308 points. The others in order of points were as follows: George M. Hendee, Springfield, Mass., 1 3/4 Indian, 1,306 points; H. A. Glieman, New York, 1 3/4 Rambler, 1,296 points; N. P. Bernard, Hartford, Conn., 2 1/4 Columbia, 1,295 points; E. M. Coates, New Britain, Conn., 2 1/4 Columbia, 1,292 points; A. J. Banta, New York, 1 3/4 Rambler, 1,277 points; F. A. Baker, Brooklyn, 1 3/4 Indian, 1,276 points; Walter J. Zeigler, West Hartford, Conn., 2 1/4 Columbia, 1,266 points; James W. White, Newark, N. J., 1 3/4 Light, 1,255 points.

In the first series, comprising all tests and run from New York to Albany and return, the possible points were 817, and the combined gold and silver medal went to George B. Pieper, Brooklyn, 1 3/4-horsepower Indian, 772 points.

In the second series, comprising all tests and run from New York to Cambridge, Md., the possible points were 817, and the combined gold and silver medal went to J. M. O'Malley, Hartford, Conn., 2 1/4-horsepower Tribune, 792 points.

The committee and the referee joined in the following memorandum: The results of the contest are so remarkable and so convince-

ing that it must be apparent to all discerning men that the motor bicycle is now ready and practical for the use of the many, as hitherto it has been used by the few. The contest demonstrated that as an abridger of time and distance the motor bicycle is surpassed only by the railroad train. With intimate knowledge of the rough, winding and continuously upheaved and stone strewn roads, conditions prevailing on both shores of the Hudson river between New York and Albany, and the deep, trackless sand of lower Delaware, we make bold to say that of all road vehicles, the motor bicycle alone can do what it did on the occasion of the endurance contest, maintain an average speed of 15 miles per hour, greater than which the rules of the contest did not permit, but which is easily possible should occasion require. In this regard the performance of Holden, Hoyt and Hedstrom are not short of remarkable. During the 4 days, the day's mileage being respectively 153.8, 155.2, 151.6 and 119.4, the first named two were but 1 minute late, and Hedstrom but 2 minutes in advance of his time schedule. And of the eleven survivors who reached Cambridge, all save one maintained a speed of better than 12 miles per hour. These performances challenge the attention of the civilized world. This is true also of the record of Edward Buffum in the fuel economy test. His record, 55.3 miles with 1 quart of gasoline costing at retail 5 cents, is equal to less than 1 mill per mile—transportation so economical as to almost surpass belief.

The performance of George M. Hendee also is more than notable. He weighs 243 pounds, yet the new man carrier conveyed him safely and well throughout, despite trying roads and with a delay of but 1 hour 18 minutes, due to three tire punctures on the last day of the contest.

The motor bicycle is practicable for all ages and sizes and conditions of men, and must

soon find a secure place in the social economy of the world. The peculiar advantages of the single track vehicle are manifest and undoubted. It lost favor solely because of the physical limitations of its riders. The motor bicycle, which equalizes the physical powers of all men, must be the means of regaining the lost ground and more.

The system of scoring was as follows:

For endurance—250 points per day for each contestant averaging not more than 15 miles and not less than 10 miles per hour, plus 1 hour 15 minutes for meals and 10 minutes for variation of watches, the awards to be made, however, for the closest adherence to the fast schedule, regardless of all allowances. Penalization was at the rate of 1 point for each minute a rider arrived behind his slow schedule at night controls.

For hill-climbing—100 points to all contestants surmounting Fort George hill, New York—length 1,900 feet, grade 10 per cent—in 2 minutes or less without pedal assistance. For pedaling, a penalty of 25 points was imposed; for stoppage on the hill, 5 points, a second trial being permitted.

For starting—100 points to all contestants whose engines in two trials started within 10 seconds of the word "Go"; one point penalty for each second or fraction thereof up to 30 seconds, when a penalty of 25 points was imposed.

For slow speed—100 points to the contestant covering 1-16 of a mile in the slowest time; one point less, respectively, for other competitors in the order of their times.

For economy—To the contestant completing the greatest distance with 1 quart of gasoline, a number of points, equal to the number of starters—17; one point less, respectively, for each of the other competitors in the order of their finish.

STOPPED BY DIRTY FUEL

New York, July 14—Charles G. Wridgway completed to-day two round trips between this city and Boston in a Peerless car, coming 1,000 miles in 65 hours 45 minutes, which now stands as the record for a double round trip between the two cities.

Wridgway was out on an attempt to make a long distance non-stop run. He made the first round trip with success and without incident, and had reached a point just beyond Springfield, when his engine was stopped by a piece of waste in the carbureter, which had gotten in through the gasoline, being poured in direct instead of through the strainer, which had been lost en route. Despite the stop, which occurred after 611 miles had been covered, Wridgway insisted on continuing and completing the two rounds.

SUMMARY OF THE MOTOR CYCLE TESTS

Position	Name	Home	Machine	Transmission	H. P.	POINTS EARNED					
						Endurance	Hill climbing	Starting	Slow Speed	Economy	Total
1	George N. Holden	Springfield	Indian	Chain	1 3/4	1,000	100	100	94	16	1,310
2	Fred C. Hoyt	Springfield	Indian	Chain	1 3/4	1,000	100	100	98	11	1,309
3	Oscar Hedstrom	Springfield	Indian	Chain	1 3/4	1,000	100	100	95	13	1,308
4	George M. Hendee	Springfield	Indian	Chain	1 3/4	1,000	100	100	92	14	1,306
5	H. A. Glieman	New York city	Rambler	Chain	1 3/4	1,000	95	100	100	1	1,296
6	N. P. Bernard	Hartford	Columbia	Chain	2 1/4	1,000	100	98	88	9	1,295
7	E. M. Coates	New Britain, Conn.	Columbia	Chain	2 1/4	1,000	100	100	87	5	1,292
8	A. J. Banta	New York city	Rambler	Chain	1 3/4	1,000	100	75	99	3	1,277
9	F. A. Baker	Brooklyn	Indian	Chain	1 3/4	1,000	75	100	91	10	1,276
10	Walter J. Zeigler	West Hartford	Columbia	Chain	2 1/4	1,000	100	75	89	2	1,266
11	James W. White	Newark, N. J.	Light	Chain	1 3/4	1,000	75	75	93	12	1,255
12	W. Harris Latham	Brookline, Mass.	Yale-California	Belt	2	750	75	100	96	15	1,036
13	Edward Buffum	Boston	Yale-California	Belt	2	500	—	—	—	17	517
14	J. J. O'Connor	Hartford	Columbia	Chain	2 1/4	251	—	—	—	—	251
15	F. W. Tuttle	Hartford	Columbia	Chain	2 1/4	251	—	—	—	—	251
16	J. J. McNevin	New York city	Rambler	Chain	1 3/4	250	—	—	—	—	250
17	S. J. Chubbuck	Toledo, Ohio	Yale-California	Belt	2	250	—	—	—	—	250
18	E. W. Goodwin	New York city	Indian	Chain	1 3/4	—	—	—	—	—	—
FIRST SERIES											
1	George B. Pieper	Brooklyn	Indian	Chain	1 3/4	500	75	100	90	7	772
2	Frank M. Dampman	New York City	Marsh	Belt	3	500	—	—	—	—	500
3	G. A. Breeze	Newark, N. J.	Tourist	Belt	3 1/4	187	—	—	—	—	187
4	William Simonson	Mineola, N. Y.	Armac	Belt	3	—	—	—	—	—	—
SECOND SERIES											
1	J. M. O'Malley	Hartford, Conn.	Tribune	Chain	2 1/4	500	100	100	86	8	315
2	G. H. Curtiss	Hammondsport	Hercules	Belt	2 1/4	250	—	100	—	6	792
3	H. Y. Bedell	Hackensack, N. J.	Indian	Chain	1 3/4	—	100	100	97	4	354

FORMING THE ST. LOUIS CARAVAN

THE touring committee has now completed all the details of the tour. Entry numbers are being forwarded to entrants this week. Route cards for the entire distance on all divisions are now in the hands of the printers and will be distributed to the entrants next week. Each participant will receive cards for the distance for which he is entered. With each allotment of cards will be sent a leather weather-proof case with celluloid face, into which the card for the day can be slipped for handy reference and preservation. Supplies of confetti will be sent to-morrow to all the principal night stops. The roster of pilots is now practically complete. In many sections in Ohio, Illinois and Indiana members of the division committees or of local clubs have placed arrows for a considerable distance on the roads leading to the night stops. Chairman Mudd, of the Chicago division, has appointed S. J. Turnblad, of Minneapolis, as a member of his committee. Mr. Turnblad was selected by the Minneapolis Automobile Club to represent it in the committee. There will be a considerable delegation of entrants from this club.

Arrangements have been made in accordance with a suggestion of President Whipple to have tourists act as couriers, carrying letters from the mayors of Boston, Albany, Utica, Syracuse, Rochester, Buffalo, Cleveland, Toledo, Chicago, Detroit, Philadelphia, New York, Baltimore, Pittsburg, Columbus, Indianapolis, Louisville, Cincinnati, Kansas City and other cities to Mayor Wells, of St. Louis, for presentation on St. Louis day, August 11. The bearers of these letters will be received by the mayor and the letters of congratulation and greeting handed by the bearers to the chief of the exposition city.

During the past week a great number of letters have been received from repair and garage men, both those officially designated and others, stating that preparations to take care of the cars have been made and that extra supplies of parts, tires and gasoline have been provided for.

Harlan W. Whipple, president of the A. A. A., has sent the following notice to the participants in the tour:

The American Automobile Association wishes to call the particular attention of the participants to the matter of their conduct in driving their machines during the run. The attention of thousands of people, who would ordinarily not notice us, will, on this occasion, be directed to our actions. We want you to join loyally with us in being particularly careful during this time as to the way in which you meet and pass teams, in avoiding racing and in the observation of speed laws of the different cities and towns through which we pass. We wish to warn you that any car that is convicted of flagrant violations of the rights of others on the road, or of speed laws, will be disqualified and will not receive a certificate. We believe that careful attention to one and all of these regulations will do the cause of automobile more good than anything else we can do, and we know that you all want to aid us in accomplishing this result. You must remember that the eyes of the whole public are on us in this tour.

Following are the entries for the run as received by the touring committee up to July 15 with corrections and full particulars. The list gives also the points between which the entrants travel, whether or not a chauffeur will be carried, the make and power of the car and his club membership:

No. 1—Harlan W. Whipple, Andover, Mass., president of the American Automobile Association. Boston to St. Louis by New England and main

line routes. Chauffeur. Mercedes 20-27 horsepower. Automobile Club of America, Massachusetts Automobile Club and Automobile Club of New Jersey.

No. 2—John Farson, Chicago, first vice-president American Automobile Association. From Chicago to St. Louis, by main line. Will carry five passengers, including chauffeur. Drives Apperson car, 60 horsepower. President Chicago Automobile Club.

No. 3—C. H. Gillette, New York, secretary American Automobile Association and secretary of touring committee. New York to St. Louis by main line. One passenger. Pope-Hartford car, 10 horsepower. Member Automobile Club of America, Automobile Club of New Jersey and Automobile Club of Philadelphia.

No. 4—Windsor T. White, Cleveland, O. Director of American Automobile Association. New York to St. Louis by main line. Chauffeur. Drives White steam car, 10 horsepower. President National Association of Automobile Manufacturers and member of Cleveland Automobile Club.

No. 5—Elliot C. Lee, Boston. Director American Automobile Association. Boston to Buffalo, by New England main line routes. Chauffeur. White touring car, 10 horsepower. President Massachusetts State Automobile Association, president Massachusetts Automobile Club.

No. 6—A. R. Pardington, Brooklyn. Director American Automobile Association and chairman of racing board A. A. A. New York to Albany, by main line. Franklin, 10 horsepower. Long Island Automobile Club.

No. 7—Dr. Julian A. Chase, Pawtucket, R. I. Director American Automobile Association. Providence to Albany by New England route. Two passengers. Stanley steam car, 6 horsepower. President Rhode Island Automobile Club.

No. 8—Dr. W. E. Millbank, Albany, N. Y. Director American Automobile Association. Albany to Buffalo, by main line. Two passengers. Knox, 8 horsepower. President Albany Automobile Club.

No. 10—Augustus Post, New York. Chairman touring committee A. A. A. New York to St. Louis, main line. Chauffeur. White steam touring car. Long Island Automobile Club.

No. 11—Frank X. Mudd, Chicago. Member touring committee A. A. A. Chairman Chicago division, Chicago to St. Louis, main line. Five passengers. Chauffeur. Austin, 50 horsepower. Chicago Automobile Club.

No. 12—W. C. Temple, Pittsburg, Pa. Member touring committee. Chairman Pittsburg division. Pittsburg to St. Louis. Four passengers, including chauffeur. President Automobile Club of Pittsburg and life member of the Automobile Club of America.

No. 14—R. P. Scott, Baltimore, Md. Member touring committee. Chairman of Baltimore division. New York to St. Louis, main line route. Six passengers, including chauffeur. Peerless, 70 horsepower. Automobile Club of America and member of Automobile Club of Maryland.

No. 15—Charles J. Gilden, Boston, Mass. Member touring committee. Chairman of the New England division. Boston to St. Louis, by New England and main line routes. Four passengers, including chauffeur. Napier, 24 horsepower. Automobile Club of Great Britain and Ireland, Automobile Club of America and Massachusetts Automobile Club.

No. 16—William Monypeny, Jr., Columbus, O. Member touring committee. Chairman Columbus division. Columbus to St. Louis, by national highway. Four passengers, including chauffeur. Stearns, 24 horsepower. Columbus Automobile Club.

No. 17—H. W. Smith, Syracuse, N. Y. Member touring committee, chairman of the New York state division. Syracuse to St. Louis, main line route.

No. 18—George S. Waite, Cleveland, O. Member touring committee, chairman of Cleveland division. Cleveland to St. Louis, by main line. White steam touring car, 10 horsepower. Cleveland Automobile Club.

No. 19—James L. Breese, New York. Member racing board. Buffalo to St. Louis, main line route. Mercedes, 40 horsepower. Automobile Club of America.

No. 20—F. C. Donald, Chicago. Member racing board. Chicago to St. Louis, main line. Four passengers, including chauffeur. Pope-Toledo, 24 horsepower. Chicago Automobile Club.

No. 21—H. Frederick Lesh, Boston. Boston to St. Louis, main line. Five passengers, including chauffeur. Pope-Toledo, 24 horsepower. Newton Automobile Club.

No. 22—Thomas B. Jeffery, Kenosha, Wis. Kenosha to St. Louis, main line. Four passengers, including chauffeur. Rambler, 16 horsepower.

No. 23—A. J. Willis, Akron, O. New York to St. Louis, main line. Four passengers, including chauffeur. Cleveland Automobile Club.

No. 24—Haynes-Apperson Co., Kokomo, Ind. New York to St. Louis, main line. Two passengers. Haynes-Apperson, 12 horsepower.

No. 25—Hart D. Newman, 212 Carondelet street, New Orleans, La. Baltimore to St. Louis, by national highway. One passenger. White touring car. New Orleans Automobile Club.

No. 26—Sam Stone, Jr., New Orleans, La. Baltimore to St. Louis, by national highway. One passenger. White touring car. New Orleans Automobile Club.

No. 27—Royal R. Sheldon, Boston. Boston to St. Louis, by New England main line. Chauffeur. Drives de Dietrich, 30 horsepower. Massachusetts Automobile Club.

No. 28—Dr. R. E. Rolfe, Boston. Boston to St. Louis, New England and main line routes. Two passengers. Franklin, 16 horsepower. Massachusetts Automobile Club.

No. 29—Paul H. Deming, New York. New York to St. Louis, main line. Two passengers and chauffeur. White touring car. Automobile Club of America.

No. 30—George H. Lowe, Boston. Boston to St. Louis, by New England main line. Three passengers, including chauffeur. White touring car. Massachusetts Automobile Club.

No. 31—Ray D. Lillibridge, 170 Broadway, New York City. New York to St. Louis, by main line. White touring car.

No. 32—Webb Jay, Cleveland, O. New York to St. Louis, by main line. Chauffeur. White touring car. Cleveland Automobile Club.

No. 36—Cecil P. Wilson, Boston. Boston to St. Louis, New England main line. Two passengers. Chauffeur. Franklin, 10 horsepower. Massachusetts Automobile Club.

No. 37—A. R. Pendleton, St. Louis, Mo. New York to St. Louis, by main line. Two passengers and chauffeur. Pope-Toledo, 24 horsepower.

No. 38—W. E. Metzger, Detroit, Mich. New York to St. Louis, main line. Three passengers and chauffeur. Cadillac, 8½ horsepower. Detroit Automobile Club.

No. 39—F. N. Manross, Forestville, Conn. Bristol, Conn., to St. Louis, by New England and main line routes. Four passengers. Columbia, 24 horsepower. Hartford Automobile Club.

No. 40—E. H. Wallace, Freeport, Pa. Pittsburg to St. Louis. Two passengers. Rambler, 7 horsepower.

No. 41—Matheson Motor Car Co., Holyoke, Mass. Springfield to St. Louis, by New England and main line routes. Three passengers. Matheson, 24 horsepower. Automobile Club of Springfield.

No. 42—F. A. La Roche, New York. New York to St. Louis, by main line. Two passengers and chauffeur. Darracq, 15-20 horsepower. Automobile Club of America and Automobile Club of Philadelphia.

No. 43—G. Douglas Neare, Cincinnati, O. Cincinnati to St. Louis, by national highway. Two passengers. St. Louis, 12 horsepower. Cincinnati Automobile Club.

No. 44—John K. List, Wheeling, W. Va. Wheeling to St. Louis, by national highway. Four passengers. Cadillac. Wheeling Automobile Club.

No. 45—Dr. William J. Morton, New York. New York to St. Louis, by main line. Two passengers. Autocar, 12½ horsepower.

No. 46—George Otis Draper, Hopedale, Mass. Worcester to Albany, by New England route. Two passengers and chauffeur. Packard, 22 horsepower. Massachusetts Automobile Club.

No. 47—H. H. Franklin Mfg. Co., Syracuse, N. Y. New York to St. Louis, by main line. Franklin, 10 horsepower.

No. 48—W. B. Saunders, Philadelphia. Philadelphia to St. Louis. Philadelphia, Pittsburg and national highway routes. Two passengers and chauffeur. Winton, 20 horsepower.

THE READERS' CLEARING HOUSE

BEWARE OF OSHKOSH

Neenah, Wis.—Editor MOTOR AGE—I notice in the last issue of MOTOR AGE an account of my having been fined recently at Oshkosh, Wis., for having exceeded the speed limit. As the article as printed gives a wrong impression, I wish to state the facts were simply that while driving a party of friends I was arrested on the charge of having exceeded a speed of 4 miles an hour at a crossing. To this I pleaded guilty and paid the fine and costs imposed. There was no "driving like a demon" nor discussion with the authorities except that upon my request that the district attorney, who had been one of the party, be asked to come over to the station, the chief of police became somewhat incensed at what he was pleased to consider an attempt to combat his authority. A short time later I was again stopped by the same patrolman while crossing a bridge at the same "high" rate of speed, but no charge was entered and I left for Neenah with a party of ladies soon afterward. As the Oshkosh ordinance restricting speed to 4 miles an hour on bridges and crossings is somewhat unusual in a city where there is no congestion of traffic, arrests under it are quite frequent, particularly in the case of out-of-town automobilists.—F. A. WILDE, JR.

STORAGE BATTERIES

Portland, Me.—Editor MOTOR AGE—Despite its common use in automobile and other industries, I have a somewhat "hazy" understanding of the storage battery. Will you kindly spare a little space in the Readers' Clearing House to an elementary explanation of the principle and action of a storage battery and the chief points for consideration in its application and maintenance?—R. W. E.

In a solution of sulphuric acid and water are placed two strips of lead. When an electric current is passed through these plates, which do not touch, for a length of time a discoloration is found on the plate to which the positive wire was attached, while the other retains its grayish color. This reddish deposit on the positive plate is red oxide of lead, formed by the passage of the current between the plates in the presence of the acid. If these two wires are connected to an instrument a current can be detected, which, being allowed to flow, reduces this red oxide to one of a lower order and oxidizes the lead on the negative plate. The current during discharge passes in an opposite direction to that of charging. This is the action in all accumulators, although the number of plates are increased. Ampere-hour capacity is a term used to show the lasting qualities of a charge and may be illustrated as follows: A battery of 40 ampere-hour capacity is capable—theoretically—of discharging 4 amperes for 10 hours, 1 ampere for 40 hours, or 40 amperes for 1 hour. Practically the discharge rate never exceeds 1 ampere, and a battery would not last long at more than an 8-hour rate, which would be a flow of 5 amperes, for this cell. The capacity depends upon the surface of the

plates or the amount of active material. The surfaces of the plates are given various forms to increase the area as much as possible for a given weight, considering as well the form best adapted to retain the active material. The active material changes its volume during discharge and charge, causing such difficulties as "buckling" or bending of the plates until one strikes an adjacent plate, causing a short circuit. The active material falls off during this process and, collecting in the bottom of the jar also short circuits. This trouble is always with the positive plate, which carries the oxide. Sulphating in a cell is caused by leaving a cell without charge. The acid in the electrolyte forms sulphate of lead, which covers the active material, thus reducing the battery capacity. Pure sulphuric acid must be used in a battery, otherwise the impurities will attack the lead. The acid is poured slowly into the water until the resultant mixture has a gravity reading on the hydrometer of 1200 at 60 degrees Fahrenheit. After being allowed to cool it is poured into the battery. Battery manufacturers stamp the charging rate on each battery. When fully charged the cells form bubbles of hydrogen gas. When these appear, cut down the charging rate until the cells "gas" on 1 ampere. At this time the battery should read 2.25 volts per cell and is fully charged. In charging, the positive charging wire is attached to the positive battery terminal. The positive charging wire may be determined by immersing both in a tumbler of electrolyte, keeping them from touching. Bubbles rise from both, but twice as many from the negative as from the positive.

OILED ROAD SUCCESS

Chicago—Editor MOTOR AGE—As the matter of good roads is being agitated, I thought other readers of MOTOR AGE might be interested in the letter which I have received from the secretary of the Chamber of Commerce of Los Angeles, Cal., of which the following is a copy.—J. T. RICHARDS.

Los Angeles, Cal.—J. T. Richards, Chicago—In reply to your letter of inquiry as to experience in this section with oiled roads, will say that for the past 4 or 5 years the use of oil on our roadways has been increasing quite rapidly, and is considered now the best method for laying the dust, as well as of making a serviceable roadway. It has been taken up by the different boards of supervisors in the surrounding counties, as well as by the superintendent of streets in this city, and I should say we have now in the neighborhood of 300 or 400 miles of oiled roads within a radius of 60 miles of Los Angeles. It has been found that when properly applied and the necessary attention is given to it, that it forms a smooth, durable surface; and in one case of a road with a 6-per cent grade treated with oil, it was found after a heavy rain-storm the road had not cut or washed, but on a road in the same neighborhood under the same conditions not treated with oil, it became impassable.

The process of preparation varies considerably according to the opinions and experience of the different workers, as well as with the different material of which the roadbed is composed. Some officials have claimed that a very sandy road would not be benefited with oil, but by repeated experi-

ment it has been found that by putting on a very heavy coat of oil the loose sand has taken it up, and by continual application a very fair roadbed has been made out of what was almost impassable sand. In some instances sandy roads have been first crowned up with a heavier soil or with clay, making a firm foundation, and then treated with oil, thus making as good a road as in other sections where the land is heavier. In some localities, where oil has been used for some time and careful attention given to repairs and renewal, the roads have become as smooth and hard as asphalt pavements and without the disadvantage of dust. In preparing an ordinary road, in some instances the surface has been loosened by a machine carrying something in the nature of a rake, for the purpose of being able thereby to mix the oil with the surface dirt. In others, where the soil is heavy and packed hard, it has been covered with oil and then a thin coating of light sand is sprinkled over this, which causes the whole to cement together, forming a hard surface. For roads of this nature, that is with a hard surface, it has been found preferable in many cases to use a light gravity oil, which is absorbed readily by the earth. In cases of light or sandy soil, it is contended by many that the heavier oils carrying more asphalt in their composition are more desirable and more effectual for the purpose.

It is a hard matter to give any definite figures as to the cost of treating roads, for the reason that conditions differ and prices of material vary in the different localities; but from the figures given by some of our supervisors it seems that it takes from 75 to 250 barrels of oil per mile for the first treatment, according to the character of the soil. About one-third of the original amount is sufficient for the second year, and thereafter in constantly decreasing amounts. It is stated that the average cost, taking the first application and the later attention, should not exceed \$100 per year per mile. It is authoritatively claimed that treatment by oil is much less expensive, even at the outset, than the use of water in laying the dust, and at the same time is enduring.—H. B. CURLEY.

CHEMISTRY OF GASOLINE

Denver, Col.—Editor MOTOR AGE—Will you briefly explain the process of manufacture of gasoline, the reasons for difference in grade of it and the chemical action in its use in an engine?—MILTON JORDAN.

Gasoline is an hydro-carbon liquid, quite volatile and explosive. Crude petroleum is the base from which it is derived by distillation. Upon heating crude petroleum in a retort "spirits" and oils are distilled, each individually being distilled between certain temperature limits, the light oils coming off first. Among these distillates may be mentioned solid paraffin, liquid paraffin, kerosene, ether, gasoline and benzine. Knowing the temperature limits for the product it is desired to extract, the gases coming over during this period are carried into a condenser and separated. The process of taking out the desired product is called fractional distillation.

Chemically gasoline consists of a combination of hydrogen and carbon having an affinity for oxygen, in combination with which, in in certain proportion, it forms a high explosive. Considered physically it is colorless and practically odorless, when pure. The ordinary product has a characteristic odor, both before and after combustion. The carefully distilled product is absolutely uniform in specific gravity, is highly volatile, and will contain more heat units per gallon than the commercial article. At ordinary temperatures it will assume a gaseous condition and when mixed with the proper amount of air will ignite. The union with oxygen gives off intense heat which expands the air to many times its original volume. This operation taking place in an engine cylinder forces the piston outward, transferring chemical energy to mechanical work.



AFFAIRS OF THE CLUBS

Tests in Syracuse—

The Automobile Club of Syracuse, N. Y., has been asked to promote a series of short-distance speed tests and brake

trials over a mile and a half of new macadamized road extending from the Candee hotel at Onondaga Valley to the summer home of E. I. Rice. The matter was brought up by Secretary-Treasurer Elliott, who at first proposed that they be held in West Onondaga street within the city limits and on an asphalt pavement, but the valley course is considered more advantageous. The idea of the club is to demonstrate to the public how quickly and in what a short distance even the largest automobile can be brought to a standstill and at the same time impress upon the minds of the members the distance in which they can stop their cars, for their own safety, in times of danger. S. M. Butler, secretary of the Automobile Club of America, will be asked to use the Mors timing apparatus for the occasion. Charles E. Candee, owner of the Candee hotel, has guaranteed to secure from property owners their consent to the use of the road and assures the club members that subscriptions will be started among those who will be benefited by the demonstrations for suitable silver cups for the winners. It is probable that the tests will take place early in August.

Buffalo Wants Meet—The Buffalo Automobile Club and the Buffalo Automobile Trade Association are planning a meet at the Kenilworth track to be held next month. A member of the club said: "Members of both the trade association and the club have had such a meet in mind for some time past, but thus far nothing has been determined in regard to it. At the present time the chief difficulty lies in the price demanded for Kenilworth track. This price is much larger than we feel we can afford to pay, and unless we can secure a reduction to a figure which suits our pocket-book we shall have to give up the meet. That would be a pity, for, with the many automobile owners in Buffalo, all more or less interested in automobile racing, such a meeting ought to prove a moderate success from a financial standpoint and provide plenty of good sport."

Brought to Time—Members of the Automobile Club of Syracuse are anxiously awaiting the reply of the New York State Fair Commission on the proposition submitted on the matter of automobile races at the coming state fair. At a previous meeting the commission decided that there should be no automobile races this fall, whereupon the club took the matter up and decided to hold an independent meet at the fair grounds some time after the fair. The result was that the commission took the matter up again and now there are prospects of the two organizations coming together and reaching an agreement in the matter.

Church for Club House—The First Presbyterian Church building of Rockford, Ill., has been offered for sale to the Automobile Club of Rockford. Indications are that the motorists will purchase the property. If this is done the first floor will be used as a garage and a second floor will be built to be used as club rooms.

Lynn Elects Officers—Thomas W. Gardiner was elected president of the automobile club which was recently formed in Lynn, Mass. W. S. Halliburton is the treasurer and Albert F. Creighton the treasurer.

Everybody In—The Peoria Automobile Club, of Peoria, Ill., which was formed a month ago already has sixty-seven members, which corresponds exactly with the number of owners of automobiles in the town.

One Paper Friendly—Six members of the Automobile Club of Grand Forks, N. D., and an invited guest from Thompson, made a run to Crookston a few days ago and a local paper is indignant that not more of the club members took part on the run. It concludes by saying: "What's the use of having an automobile club when members don't take part in the events arranged by the club?"

Guests of Horsemen—The Matinee Club, of Pittsburg and Allegheny, Pa., gave an afternoon of horse races last Saturday, at which the Automobile Club of Pittsburg was the guest. About sixty members drove their cars to the meeting and after the races two members of the club, W. N. Murray and G. E. Turner, gave a 5-mile match race. Murray won in 6:58½, Turner not being able to start, for lack of gasoline.

After Street Wreckers—At a meeting of members of the Columbus Automobile Club, of Columbus, O., held last week, resolutions were unanimously passed condemning the city officers for the present deplorable conditions of the majority of the important thoroughfares in the city. It is claimed by the club members that this condition is principally due to the cutting of trenches in the streets by street car and gas companies which fail to refill them properly. The officers of the club also contend that the city ordinance, calling upon corporations to deposit \$10,000 to \$20,000 with the city government at the time of the granting of a franchise, which sum is to be kept for the purpose of meeting claims for street repairs which the city may make against the corporations, is not complied with.

Demonstrating Slow Speed—At a meeting of members of the Automobile Club of Kansas City, Mo., held last Thursday, it was decided to give the members of the city council an automobile ride over the principal boulevards and streets. The action was taken because an automobile ordinance is now pending and the limit stipulated is 8 miles an hour, which is claimed by all the members to be insufficient. "We believe the only way to demonstrate to the members of the council how slow a machine travels at 8 miles an hour is to give them a ride," said a member of the club. "We want legislation to protect ourselves, but 8 miles on the boulevards is unreasonable. The professional walking record for a man is 8 miles an hour and the running record is 11 miles an hour and more. It is not the speed of automobiles which frightens horses, but the noise. And it is a matter of fact that a machine at low speed makes more noise than a machine geared to high speed. A speed of 12 or 15 miles an hour is the quietest speed an automobile has." The legislative committee will ask the members of the city council for a hearing and will ask that a speed of 12 miles be permitted on the boulevards and 15 miles where the present ordinance allows 12.

Canadian Enthusiasts—The pioneer automobilist of Montreal is U. H. Dandurand, who drove a car in 1899. It was with much difficulty that he was able to secure his license, as there was no provision for such vehicles, and when one was finally made out it was taken under the "bicycle, tricycle and similar vehicle" clause. At present it is estimated that there are about 125 owners of cars in the city, of which more than half are members of the Automobile Club of Canada, formed last month. The board of directors is composed of the following members: A. P. Dawes, chairman; Duncan McDonald, J. K. L. Rose, F. H. Anson, H. Beaugrand, D. Yuile, A. Berthiaume, T. Viau and Dr. Mignault. The club fee is \$20 annually and the initiation fee \$20. The by-laws are based upon those which govern the Automobile Club of America. The special tax on automobiles in Montreal is \$10, but this is considered illegal by motorists because the provincial government has declared that the tax shall be \$5. The prohibition against automobiles being driven in the mountain park is also held as illegal, inasmuch as the city council simply passed a prohibitive resolution, which is, however, being enforced as an ordinance. There are a half-dozen automobile dealers and a similar number of smaller dealers who handle bicycles and other sporting goods as a side line. American automobiles are in great favor and many of the wealthier owners have a car made in this country. English cars are sold in a large proportion, while a few of the best known French motor vehicles have also been imported. The motor cycle is not yet in great favor, but among those in use there are several of American make. The highway and public park system is kept in good shape and this will probably lead to the rapid increase of motor car owners. The authorities are well disposed toward motorists, and the daily papers are beginning to use automobile news more frequently.

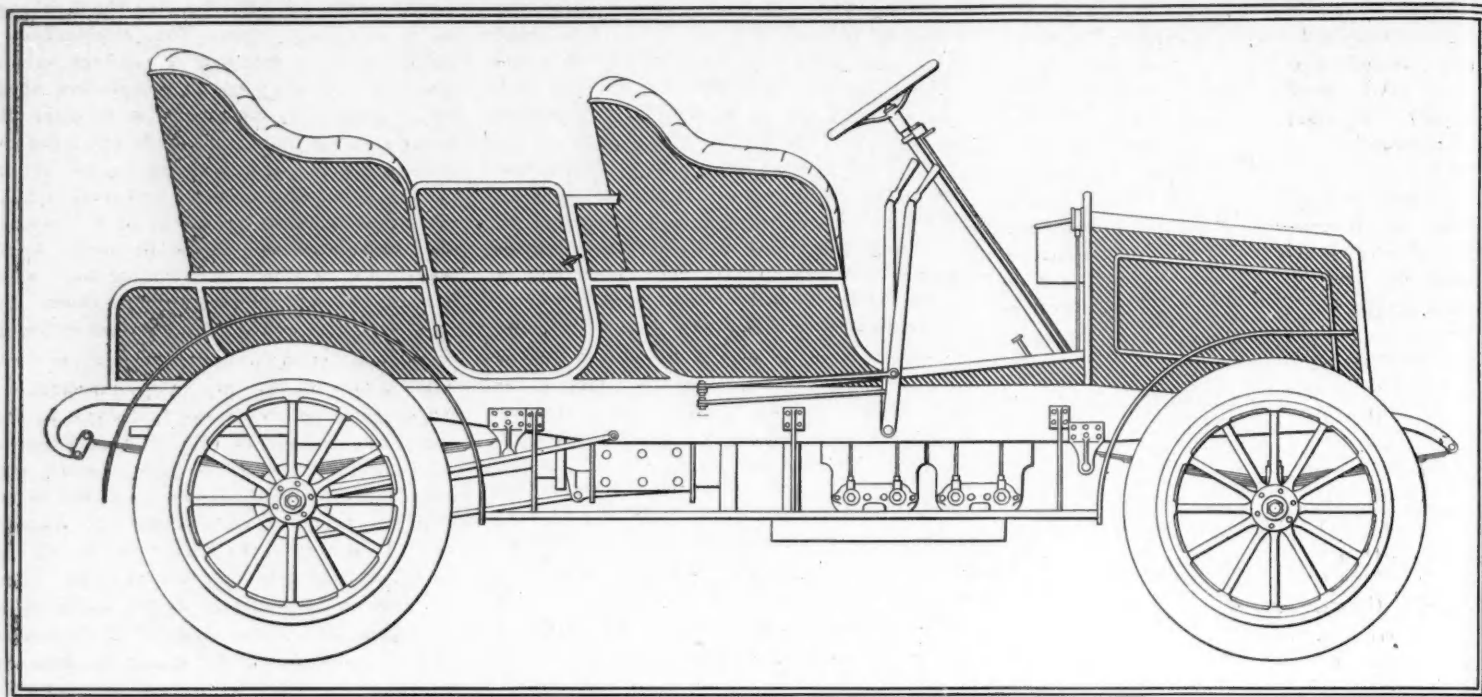
Straightaway Contests—The Automobile Club of Pittsburg, Pa., has arranged a race meet to be held Saturday of this week, on the Beechwood boulevard speedway. There will be six events, as follows: Class A, for cars of from 1 to 7½-horsepower; class B, for cars of from 8 to 13-horsepower; class C, for cars of from 14 to 20-horsepower; class D, for cars of more than 20-horsepower; class E, free-for-all for members of the club; class F, free-for-all.

After Glass Throwers—At a meeting of the board of governors of the Rhode Island Automobile Club it was decided to hold a meet, probably during the first week in September. A letter was also drafted and sent to the city police commission requesting that better attention be given to the glass ordinance, as numerous tire accidents happen on account of many streets being covered with broken pieces of glass.

Club in Jackson, Mich.—Motorists of Jackson, Mich., recently formed the Jackson Auto Club. Emmet L. Smith was named president, A. A. Bennett vice-president, Winthrop Withington secretary and treasurer and E. S. Bowman captain. There are fifty owners in town and the club's officers expect that most of them will become members of the new organization.

Enthusiasm at Winnipeg—The Winnipeg Automobile Club, of Winnipeg, Canada, made a run to Silver Heights July 10. Forty-six cars conveying 150 enthusiasts took part in the affair.

THE NEW FOUR-CYLINDER WINTON



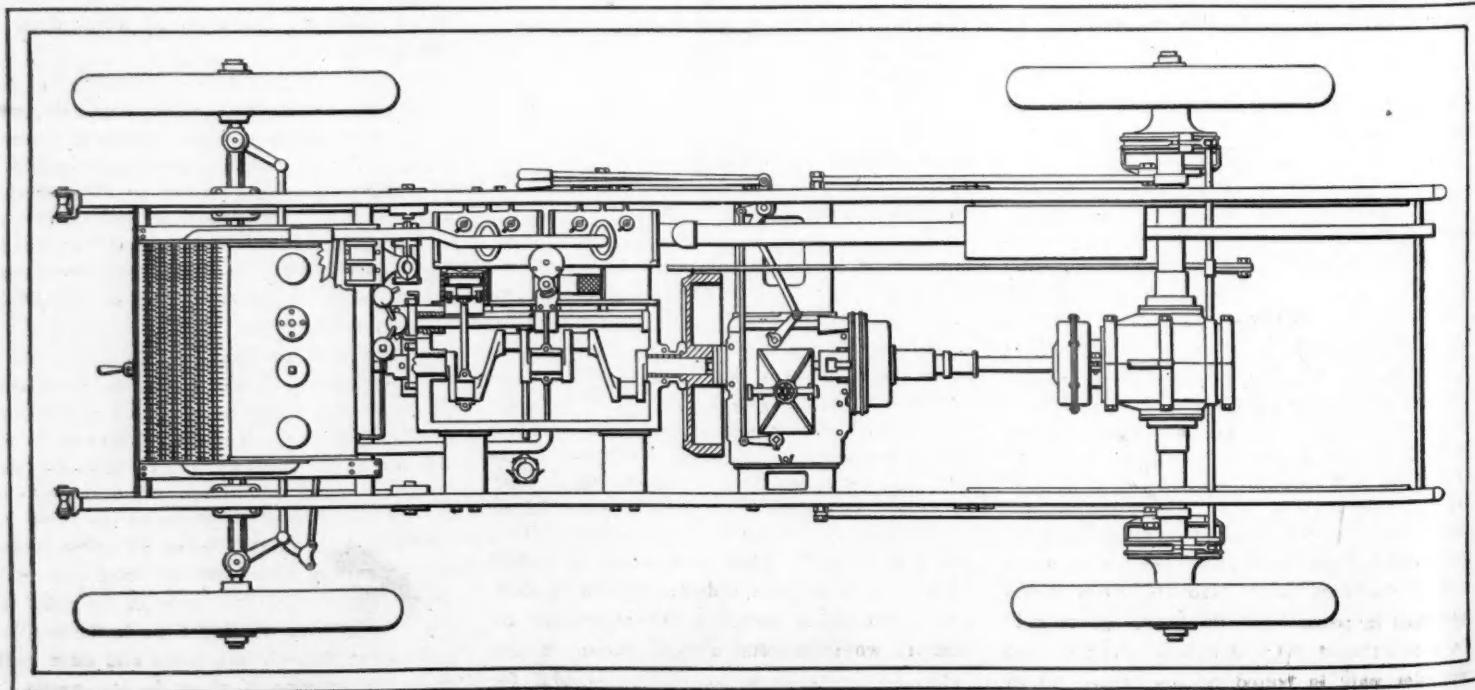
SIDE ELEVATION OF THE FOUR-CYLINDER WINTON TOURING CAR

WHEN it became known some time ago that the Winton Motor Carriage Co., of Cleveland, O., was developing a four-cylinder car to be brought out this summer and to be the leader for next season's trade, there was considerable speculation concerning the character of the prospective car. The recent introduction of the car, however, shows it not to be so great a departure from previous Winton construction as might have been supposed, for while the "Quad," as the new car is called, is essentially different from the two-cylinder Winton, its general system of design is based upon that of the two racing Bullets which have been used so extensively in track work, this system being, briefly, the use of a four-cylinder motor with cylinders horizontal and in line and of a propeller shaft and bevel gear drive. Coupled with this power plant is a long side door tonneau car of distinctively Winton design. The side members of the main frame are of one-piece channel

section pressed steel, of a peculiar design, which serves to form the bonnet taper in front. The depth of the frame varies from 1 3/4 inches to 7 inches, depending upon the stresses at the various points. At the forward end, a dropped cross channel supports the radiator and starting crank bearing, acting also as a frame spreader. Between the rear spring hangers is a cross tube. The rear end of the radiator is supported by a transverse steel tube riveted to the frame. This tube also forms a support for the steering gear case. The starting crank is not detachable, but is shifted into engagement through a spiral slotted sleeve, and is forced out of engagement by a helical spring, a pin in the crank transmitting the motion. Horns or "pump handles" at either end of the frame support semi-elliptical springs.

The front axle is of square section, slightly dropped, and is fitted with bronzed bushed steering knuckles, containing spring capped oil

cups. The front wheels are equipped with ball bearings. The rear axle bearings are equipped throughout with 1-inch balls, and the hardened steel pinion drive shaft has a plain bronze bushing, lubricated by a spring grease cup. Cones and races are interchangeable. A spur differential is used, to the case of which is attached the bevel gear. The inner bearings are not adjustable, the axle adjustment being made by screwing a threaded clamp collar and then locking in position. The cones are pinned to prevent rotation. The rear axle case is split vertically and is held in place by bolts. The case cap containing the bevel drive shaft and its bearing, is allowed a transverse movement to adjust the pinion with the bevel gear. This is accomplished by two screws. After proper alignment, bolts clamp the cap in position. The wheels are keyed and pinned to the axle. An external band brake operates upon each hub drum, which is integral with the wheel hub. These brakes are operated by a rocker



PLAN VIEW OF THE CHASSIS OF THE FOUR-CYLINDER WINTON

shaft to which is attached a link, connected to the brake pedal. Two radius rods and two driving struts limit the axle movement and take driving and braking strains. The struts are placed one above and one below the drive shaft, being pivotally connected at their forward ends to the transmission case and at their rear ends to the rear axle case. These rod lengths the radius rods, are so located as to remove from the universal joints and drive shaft pinion all strains except the driving torque. A telescopic joint allows for the variation in shaft length due to the spring action. Besides the brakes there is an emergency brake operated by the high speed lever.

The wheel base is 8 feet 8 inches, and the gauge, 56½ inches, or standard. The length over all of the car is 12 feet 6 inches. The springs in front are 38 by 2 inches and of five leaves. Those in the rear are 44 by 2 inches and of six leaves. The car is equipped with twelve-spoke, artillery wood wheels, fitted with 32 by 4-inch tires in front, and 34 by 4½-inch tires in the rear.

The four cylinders of the motor lie parallel on the same side of the crank shaft. The cylinder axes are horizontal and are located transversely in the frame. By bolting the cylinder

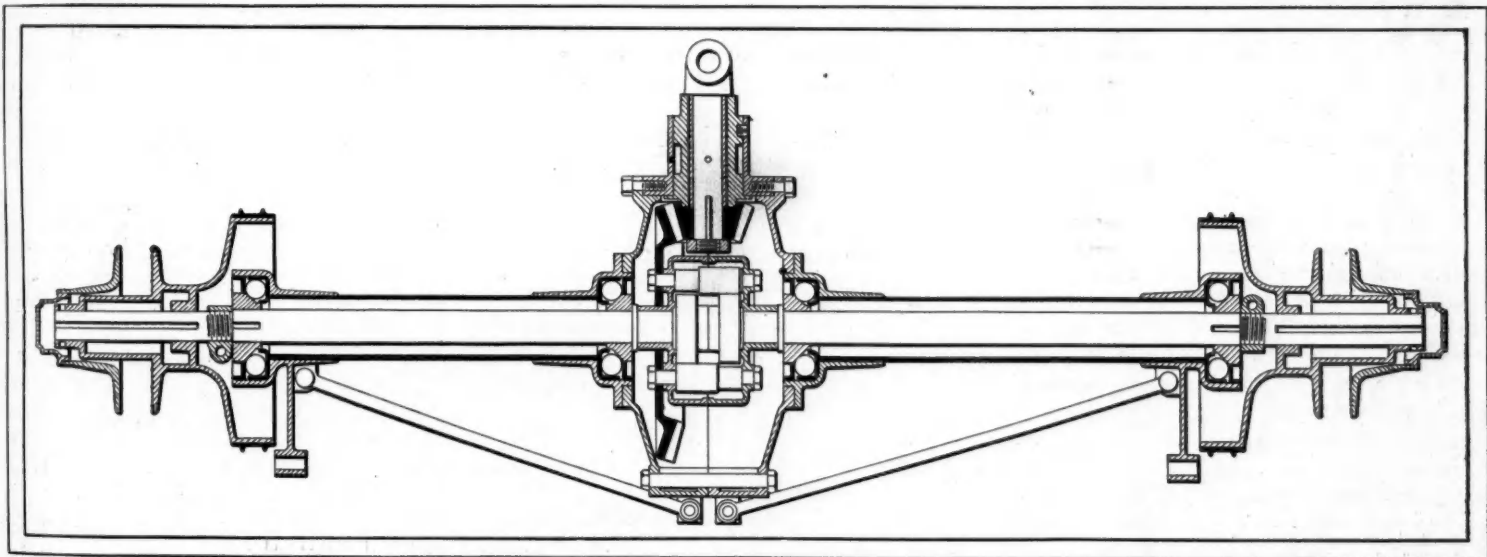
circuit breaker gears and air pump, permitting liberal lubrication of all moving parts, and excluding dirt. The crank shaft connecting rods and valves are drop forged. The crank shaft and crank pin bearings are of ample length to reduce wear. The inlet chamber castings are also cast in pairs and are bolted to the cylinders, having copper-asbestos gasket joints. The suction pipe from the carburetor attaches to these chambers. The governing air pressure from the pump acts on a plunger for producing the speed governing function by varying the pressure on the piston and so regulating the volume of the charge.

Handhole covers are placed on the motor crank case and transmission gear case, allowing inspection by unscrewing a hand wheel and sliding a bridge. Upon tilting, using the lug as a fulcrum, the cover can be lifted. This construction gives an easily manipulated, oil and dust tight cover.

The crank shaft and pistons can be removed by detaching the upper half of the engine crank case. The exhaust valve springs are reached through the cover plate. The inlet and exhaust valves are arranged in line, and the exhaust valve is water jacketed and has a bearing at the exhaust valve chamber and also at

to the nozzle at its opening is an auxiliary air pipe, containing a spring closed diaphragm. Surrounding the diaphragm in a strangling cone. This combination is proportioned to maintain a constant vacuum over the aspirating nozzle independent of the motor speed. The motor suction lifts the diaphragm and permits more air to enter the carburetor when speed increases beyond the capacity of the fixed opening, and automatically closes this opening by means of a spring as the speed decreases. Below the nozzle, on the way to the cylinders, is a mixing tube, which contains six pairs of reverse gauze cones. But one carburetor is used for the four cylinders.

The ignition equipment consists of one 6-volt accumulator and five dry cells, connected to a double plug switch on the footboard, so that either may be used at will. Normally the car is operated on the accumulator, the dry cells being for such an emergency as not having properly cared for and charged the accumulator. A quadruple vibrator coil is mounted on the dash, one coil for each cylinder. Bevel gears drive the circuit breaker shaft, which extends upward at an angle of 15 degrees, so that its operation can be viewed by lifting the floor board. The Winton circuit breaker is dust proof. The contacts are of hardened



SECTIONAL VIEW OF THE WINTON REAR AXLE

lugs to one of the side frame members, and the crank case arms to the other, the use of a sub frame is obviated. The carburetor spark plugs and the circuit breaker are readily reached by lifting the sectional floor board, under which they are placed.

The regular Winton system of pneumatic control is retained. The air pressure for governing the motor is produced by a pump, located at the forward end of engine crank case and driven by a crank attached to the cam shaft. Following the air line the suction is from the crank case and the delivery to the receiver. From this receiver, this line leads to a T, delivering the pressure to the inlet valve air line and the pedal governor line. Another T in the line also connects to a valve, operated by an upper lever on the steering pillar sector, which may be used independently of the foot button, to regulate the motor speed.

The cylinders, which are 4¼ by 5 inches, are cast in pairs, with the heads, water jackets and exhaust valve chambers integral. Each cylinder pair is bolted to the halved aluminum crank case which encloses the cam gears,

the crank chamber. At the crank case end is a cylindrical plug, slotted to receive the exhaust cam rollers, the whole being prevented from rotating by a pin working in a slot in the exhaust valve spring chamber.

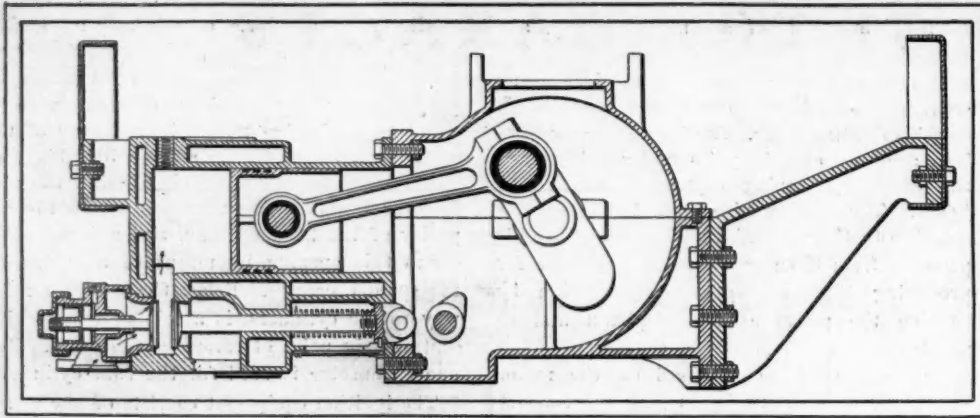
The motor exhausts into a receiving or expansion chamber lying directly beneath the cylinders, from which it passes to a second expansion chamber through a pipe. From here it passes to the air. A pan beneath the motor prevents mud and moisture affecting motor parts, which parts, as stated, are encased excepting the crank shaft ends.

In the carburation system gasoline flows by gravity through a gasoline strainer, which abstracts dirt and foreign matter. The strainer has a drain cock for removing the deposit. From the strainer, the gasoline passes to a float chamber. The suction of the motor draws fuel into an adjustable aspirating nozzle. This adjustment, when once made, is altered only to accommodate different grades of gasoline. Above the nozzle is an adjustable air shutter which supplies a fixed amount of air. This also requires no adjustment, except for unusual atmospheric changes. Perpendicular

steel, and the construction throughout is substantial.

Pressure taken from the air pump through a reducing valve forces oil to eight adjustable sight feeds, placed on the dash. A pressure gauge attached to the lubricating system is mounted on the dash. These eight leads carry oil to each cylinder, one line leading to each crank shaft outside bearing and two to the intermediate bearing. The transmission gear is lubricated by the splash system, enough oil being carried in case so that the gears dip. The motor oiling is automatic.

A gear driven centrifugal pump is attached to motor crank case on its under side. From the pump, a cast aluminum T connection distributes water upward to each cylinder pair. The top water connection supports the foot button and directs the water to the lower row of the main radiator tubes. Passing successively through nine rows of tubes, the water leaves the top of the radiator to enter the water tank, from which it flows to the auxiliary radiator underneath the tanks and main radiator. By gravity it flows to the pump. A drain cock is attached to the bottom of the



SECTION THROUGH ONE CYLINDER OF THE WINTON MOTOR

pump, which is at the lowest part of the circulating system.

The regular Winton radiator-tank unit is retained. The main radiator consists of fifty-four $\frac{1}{2}$ -inch copper tubes, each 22 inches long, with 17-16-inch square radiating fins. The auxiliary radiator consists of sixteen $\frac{5}{8}$ -inch copper tubes, each 22 inches long. Oil, water and gasoline are contained in one large partitioned tank underneath the bonnet. The warm water in this way tends to keep the oil in a fluid condition in cold weather. There is a heat insulating space between the gasoline tank and the oil tank, tending to prevent gasoline from becoming heated.

Between the motor and the transmission gear is a universal coupling which accommodates itself to alignment variations, due to abnormal road conditions. The transmission is of the Winton individual clutch type, giving two speeds forward and a reverse. The transmission has been modified as to detail only, making it more compact. All clutches consist of one cone and one flat faced member, acting upon a bronze member.

The shaft is practically an extension of the crank shaft and rotates at the same speed as the crank shaft at all times. To this shaft are keyed steel pinions. Three holes in one pinion carry loose pins. A gear on the same shaft has bolted to it the yoke supporting the forward universal joint cross. To the counter shaft is keyed a steel pinion meshing with the gear on the main shaft, while two loose counter shaft gears mesh with the main shaft pinions.

When a yoke lever, connected to the outside operating lever, is moved, through a clutch ball, dogs and a disk, it forces loose pins against a steel cone. As soon as the cone comes in contact with gear the whole shaft moves toward the flywheel, taking with it a keyed face friction until a fibre washer, interposed between the steel disk and brass extension of the gear, is clamped. This rotates the universal joint at the motor speed, no gears driving. The low gear change is from the main shaft and one of its keyed pinions to the counter shaft gear meshing with it. This rotates the counter shaft at a lower speed than the main shaft and proportional to the gear ratio. From the counter shaft the drive is from the fixed counter shaft gear to the loose main shaft gear, and then to the universal joint.

The reverse combination is identical in operation with that of low gear forward, excepting that the shaft and counter shaft are connected by an intermediate pinion not meshing directly. This reverses the counter shaft rotation and therefore that of the universal joint. When the high gear lever is moved counter to the high speed direction by means of an outside operating lever, it operates the band brake attached to the transmission gear case. The low speed and reverse are controlled by a single lever.

Two arms from either side of the transmission gear case extend to meet the frame, similarly to the motor construction. An aluminum cap forms an oil-tight, dust-proof case for the universal joint. A similar case encloses the universal point at the axle end of the drive

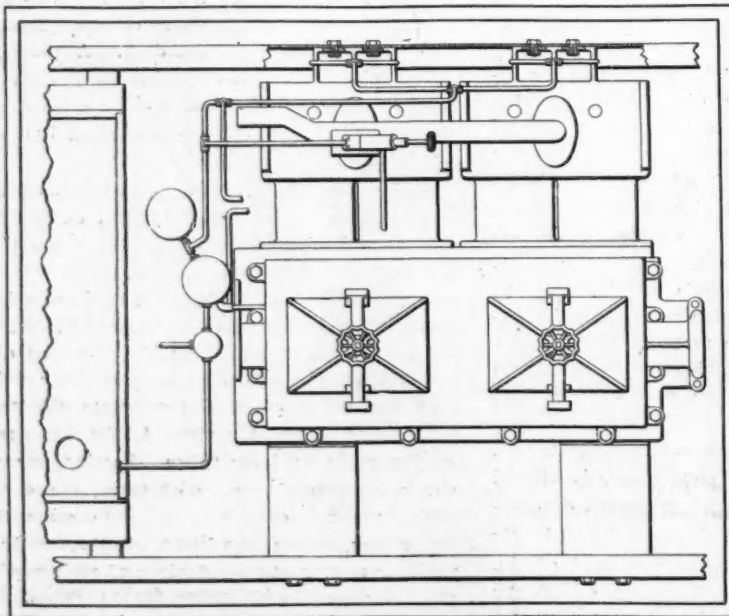
shaft. A drain is placed in the bottom of the transmission gear case for removing oil and for flushing.

The steering wheel tube rotates inside of a stationary sleeve which is bolted to the steering gear case and supports a notched sector clamp at its upper end. There are two short levers, operated one on the top and one on the bottom of this notched sector. The upper lever is attached to a rod directly in front of the steering column, passing down to steering gear case, at which point it operates a relief valve connected in the air line to vary the speed of the motor, similarly to the foot button, but differing from it in that it has no spring return and will remain and govern for the speed corresponding to the position at which it is placed on the sector.

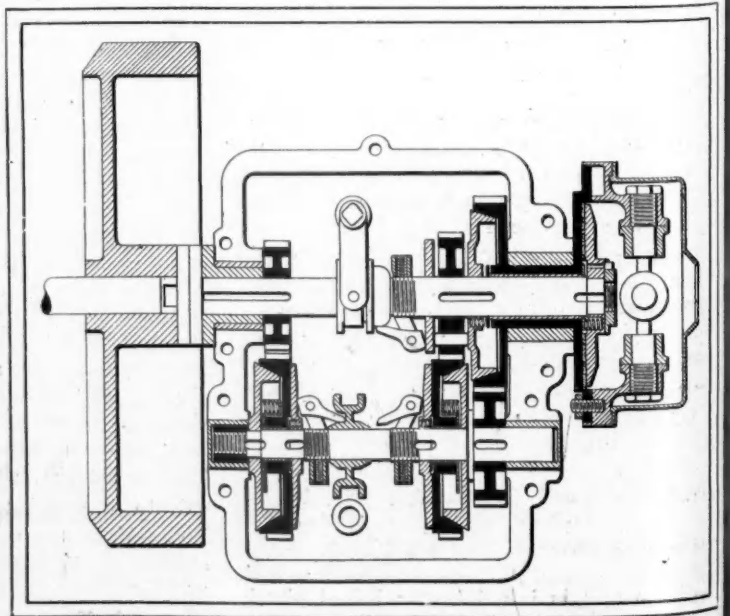
The lower lever is attached to a brass sleeve surrounding the rod referred to. A lever at its lower end, through a system of bell cranks, connects with the circuit breaker case to advance or retard the spark. The worm sector has adjustable eccentric bushings to take up wear, and also a bottom adjustment on the worm.

The body is a side entrance tonneau, with an entrance on either side. The bonnet and dash are in one piece, made of sheet aluminum, finished with brass cornice pieces. A cast aluminum body frame supports the seats, which are of laminated wood. The front seat is divided. A pocket in the front of the tonneau is sufficiently capacious to accommodate light coats, gloves and other touring paraphernalia. The locker underneath the tonneau seat, which is reached from the rear of the car, is utilized for tools and luggage. The tonneau seat accommodates three people comfortably. The mud guards are of laminated wood, extending slightly over 90 degrees on the front wheel and 180 degrees on the rear. A long laminated wood side step extends from one guard to the other, making the entry for both front and tonneau seats.

In upholstering and general finish the new car is much like the older two-cylinder Winton. The seats have the same deep, tufted, spring backed, leather upholstering with roll edges. The car is impressive in appearance and should be very comfortable on account of its long wheel base and the fact that the center of gravity of the tonneau and its load is not back of the rear axle.

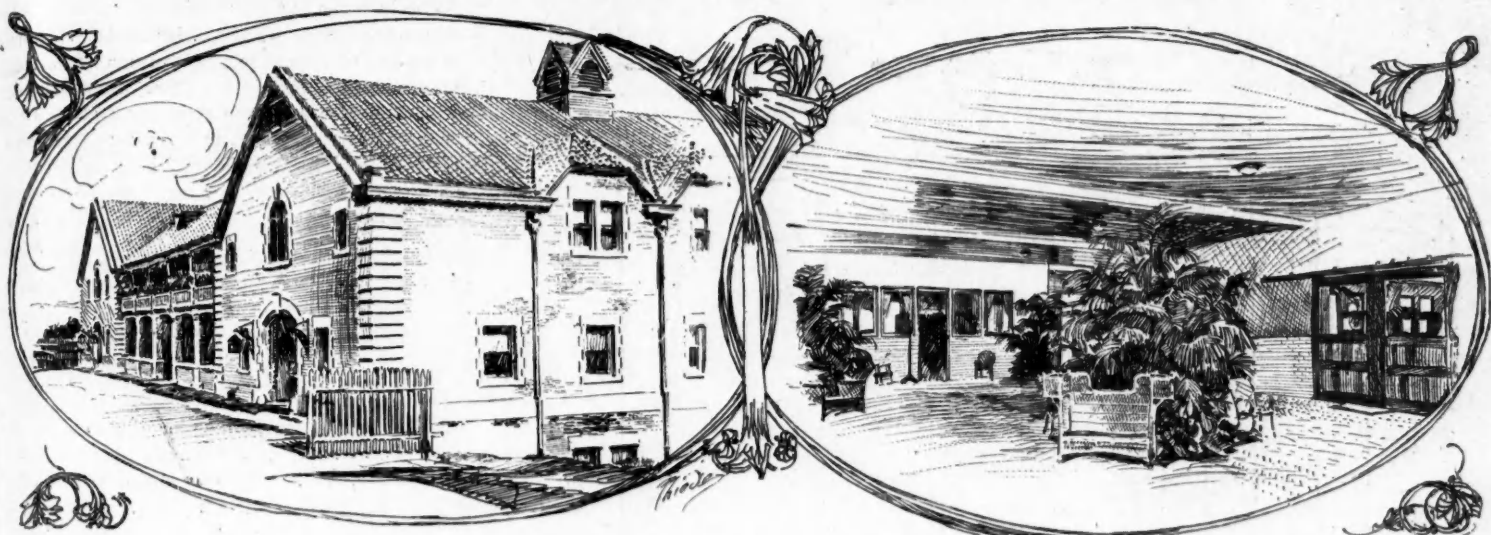


PLAN VIEW OF THE WINTON MOTOR



SECTIONAL PLAN OF THE WINTON TRANSMISSION

GOSSIP OF THE GARAGES



THE EXTERIOR AND AN INTERIOR GLIMPSE OF F. T. E. LOVEJOY'S AUTOMOBILE STABLE

Another for Grand Rapids—A new automobile store will soon be erected in Grand Rapids, Mich. It will be located between Ottawa and Market streets and owned by J. K. Johnson.

Patriotic Whites—Either by coincidence or by premeditation, the White Sewing Machine Co., of Cleveland, O., seems to be very patriotic. It shipped a carload of machines to its San Francisco agents, which arrived there on the Fourth of July. One of the cars was painted red, another white and the third blue. When these three cars were run up Market street they created a sensation, the spectators thinking that the White company had arranged a special celebration of Independence day.

Model for Garagemen—The illustration at the top of this page is not of a public garage. It shows the exterior and a bit of the interior of a private stable whose erection was recently mentioned in *MOTOR AGE* and which so well exemplifies the artistic fashion in which motor car stables may be built that it might be very well emulated in general design by those planning to build public garages. The building is in reality an annex to the new mansion which is being built at Edgehill, a suburb of Pittsburgh, Pa., for F. T. E. Lovejoy. It is three stories high and connected with the new home by a subway. Both buildings are of the style of the early English renaissance period. The automobile house is 172 feet long by 88 feet wide, and is of gray brick and terra cotta, while the roof is of Roman tile. The architectural decoration is simpler than that of the mansion, but is, nevertheless, elaborate and attractive. Besides quarters for motor cars, a large machine shop and a power plant, there is a large lounging room, a spacious gymnasium, a billiard room, offices and quarters for servants and employees. Being situated on a natural slope, there are ground entrances to the new building on two floors. In the basement floor is the private power plant for the building and the mansion. Gas engines and dynamos are used and electric light is produced, ice manufactured, the air for the buildings filtered in a way intended to conquer Pittsburgh dust and the power supplied for vacuum sweepers and for the machine shop, which is on the next floor. A ground entrance leads to the second floor, which is the automobile home. A large cen-

tral room, with hardwood floor, tiled wainscoting and enameled walls and ceiling, contains the cars, of which there are eleven. On the left of the principal room is an automobile room for the cars of Mr. Lovejoy's sons, the offices and the billiard room. The machine shop is at the extreme end of the floor. It is equipped with many modern tools and is connected with the charging plant. A wide vestibule in front leads right and left to the third story and over the vestibule is a balcony extending across fully half the building. The gymnasium is the central room and is so arranged that it can be turned into a dance hall. To its right and left are store rooms and a tight cedar room for the keeping of furs. In the rear of the second floor are luxurious quarters for servants and employees of the household. The housekeeper's suite contains five rooms, including a kitchen.

New Winton in Frisco—The first four-cylinder Winton touring car to be shipped to Cali-

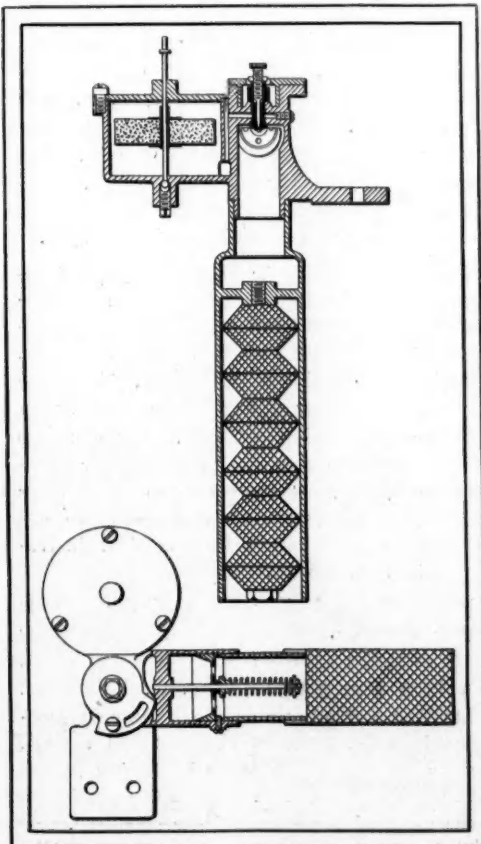
fornia was purchased by Max Schwabacher, of San Francisco. The greatest interest is shown among Frisco motorists concerning the new product from Cleveland.

Saving Time—Dr. James Ward, president of the board of health of San Francisco, Cal., recently purchased two large touring cars which he will use in his practice. He finds that the use of an automobile means a saving of about one-third of his time. His example is to be followed by several other well known Frisco physicians.

Alive and Kicking—In last week's issue of *Motor Age* it was reported that the Central New York Garage Co., of Syracuse, N. Y., had gone out of business. A letter has been received by *Motor Age* from the Syracuse concern stating that the company had simply changed its address from 310 to 210 Harrison street and had changed manager.

In New Quarters—The New York Electric Maintenance Co. has moved to 138-140 East Fifty-seventh street, New York, formerly the Wanamaker station. The entire building has been fitted up to accommodate and take care of electric vehicles. Part of the fourth floor is equipped as a machine shop with up-to-date machinery, a complete battery shop where all setting up, forming and lead burning of batteries is done, while the washing and cleaning of batteries is accomplished in the battery room, which is located in the basement. Two sub-stations have been opened by the company, one at 154 West Thirty-first street and the other at 1172 Fifth avenue, corner of Ninety-eighth street.

Works Both Ways—The Deutsch-Amerikanische Automobile-Centrale Wichmann & Co. was recently organized in Berlin, Germany. The object of the new concern is to export German automobiles, chassis, motors and accessories to America and to import American automobiles of standard make. The concern has secured the exclusive agency for North and Central America of the Argus Motoren Gesellschaft and of Sorge & Sabeck, both manufacturers of automobiles, parts and accessories, of Berlin. M. Wichmann is now in this country with 24 and 50-horsepower Argus cars, as well as a line of accessories and parts. He expects to secure agents in such cities as New York, Boston, Philadelphia, Chicago, Cleveland, Washington and San Francisco.



THE WINTON CARBURETER



MOTOR CAR TRAIN FOR THE GERMAN ARMY

Up-to-Date Chief—The fire department of Binghamton, N. Y., intends to purchase an automobile for the chief of the department.

Government Helps—The Italian government has offered a grant of \$40,000 to local authorities which desire to install motor car service between railway stations or market towns and outlying districts.

What Changes!—A full-blooded Indian, Two John, created a sensation in Bonesteel, S. D., by entering the town in an automobile, which he had purchased for \$2,000 in Omaha, Neb. The incident almost created a panic.

Such Is Fame—The dinky little councils all over the country are still playing legislators by putting up ordinances placing speed limits down to from 4 to 8 miles an hour. How great it must be to be an alderman!

Going to New Castle—An eastern automobile factory, which it is claimed employs from 300 to 400 hands, is seeking a location for its plant in New Castle, Pa. The board of trade is considering the company's proposal.

Fourth On the List—A carriage manufacturer recently said the telephone had done and is still doing great harm to the carriage industry. Next he classifies the rural delivery, then the interurban railways and last the automobile.

Quick Washee Man—The proprietor of an automobile in Peoria, Ill., is also the owner of a laundry. Heretofore he used a horse-drawn vehicle to make deliveries. A few days ago he arranged his car so that he could use it for the same purpose.

After Them—The Union, of Fort Atkinson, Wis., contains the following note: "The board of review is in session at the Snover house. Automobiles, piano playing machines and gasoline launches are among the new things on the tax list this year."

New Illinois Factory—An automobile factory may soon be located in Lincoln, Ill., according to a report from that town. L. D. Price, of Chicago, went to the town recently as spokesman for a concern and met the principal citizens of Lincoln at a meeting which was held in the council chamber. The promoters reached a provisory agreement with the citizens, and received an option on the Marsden company's plant, which is located

near the city. The property will be divided into lots and sold at \$200 each. Several citizens subscribed for a number of lots, and there are indications that a formal deal will be made in a short time. The automobile concern will manufacture a runabout which is to be marketed at \$500. Fifty men will be employed on the start.

Johnny Lake a Chauffeur—J. H. Lake has also left the bicycle brigade and is now chauffeur for H. K. Bloodgood, of New York city, who is the owner of a 20-28-horsepower Mercedes car. The New Yorker is visiting J. H. Moore at Lake Geneva and will also go to St. Louis, Mo.

Marketing New Plug—The Dayton Electrical Mfg. Co., of Dayton, O., is marketing the entire output of plugs of the Climax Ignitor Co., Amesbury, Mass. The new plug, which is considerably improved, has been named the "Magnetic ignition plug" and the price has been slightly raised.

Demonstrating, Anyway—Two new machines have entered Providence, R. I., both from Detroit. Elliot Flint has secured the agency for the Packard, and Dutee W. Flint has done likewise for the Pungs-Finch. Aside from doing a small amount of demonstrating neither agency has done any business as yet.

Joseph's a Bird—A Minnesota journal reports that a religious sect known as the "Flying Rollers" have purchased a 40-horsepower touring car and that Father Joseph, who is the superior of the order, will make an extensive tour through the country in the hope of making converts. The converts to the faith are required to deed their property to Joseph, are compelled to allow their hair to grow long, wear no shoes, and are not allowed to have pictures or musical instruments in their homes.

Name Changed—The name of the Detroit Motor Works, of Detroit Mich., manufacturer of the Sta-rite ignition plugs and specialties, has been changed to the R. E. Hardy Co. When the Detroit Motor Works was incorporated in July, 1900, it manufactured motors, but as this part of the business was sold 2 years ago and as R. E. Hardy, the president, owns most of the stock of the company, this change of name was thought advisable. The

business is increasing rapidly, it being said that as many plugs were sold the first half of this year as were sold during 1903.

Wants to Move—The United Motor and Vehicle Co., of New York, is desirous of locating its plant in Harrisburg, Pa. It requires that \$40,000 worth of the company's stock be bought by Harrisburgers, and the proposal has been referred to the manufacturers' committee.

Is Still Fast—A new mile record on a half-mile track was established by Jed Newkirk on the 999 at an automobile race meet which was held in Anderson, Ind., July 18. Newkirk covered 1 mile in 1:15%, breaking the previous record of 1:16 made by Barney Oldfield by $\frac{3}{4}$ of a second.

Big Gain in Louisville—According to recent statistics there are 207 licensed automobiles in Louisville, Ky. This is an increase of nearly 200 within the last 2 years. The local dealers are reported to hold many back orders and it is the local belief that there will be 250 cars in the city before winter.

Real Thing or None—After several weeks of dispute between the mayor of West Chester, Pa., and Dr. Daniel G. Snyder, owner of an automobile, the latter was granted permission to erect an automobile stable in the rear of his residence. The dispute arose over the fact that the doctor wanted to erect a corrugated iron building, to which nearby property owners objected. Now he will have a brick building.

Four Cars Running—The first four motor cars of the Auto-Traffic Co., of Pittsburg, Pa., were received by this concern last week and will be used for the bus line service between Etna and Allison park, which is to be started August 1. A repair shop, storage room and acetelyne gas plant will be erected at Craig street and Grant boulevard and will have a frontage of 196 feet.

Henshaw's Good Reason—The Thomas car was not in the Mount Washington "climb to the clouds." C. S. Henshaw, of Boston, New England representative of the Thomas company, is a sportsman all right enough, but this time posterity beckoned and Henshaw stayed at home to entertain a little Miss Henshaw just arrived in this world of motors and other troubles.

Hit Tree and Curb—Morris H. Seymour, a motor cycle enthusiast at Syracuse, N. Y., lost control of his machine in turning a corner last Sunday afternoon and was thrown against the curb and a tree. The fall rendered him unconscious and he was removed to the Hospital of the Good Shepherd, where it was found that he had been badly bruised about the head and shoulders.

Policeman Converted—A man had been arrested by a policeman in La Crosse, Wis., a few nights ago. Suddenly he ran away, while the policeman jumped into an automobile which was standing near by and directed the driver to chase the runaway prisoner. He was recaptured within a mile from the place where he was arrested, owing to the motor car, and the policeman was converted.

Rough Criticism—The News, of West Chester, Pa., in a note concerning two automobiles which stopped on East Gay street, the other day, said: "For a time there was a noise there which no horse could be expected to endure. Nervous persons fled from the scene. One of the machines emitted a noise like a

sausage cutter when it strikes bones in the meat and the other was like a saw mill, with several teeth out of the saw and working on hemlock boards. The man who can stop the noise of the machines has a fortune in view."

Many Suits Filed—The following suits have been instituted against the District of Columbia Automobile Co., incorporated: J. L. Loose, attachment for rent, \$115; National Electric Supply Co., attachment, \$286.19, judgment given; C. & P. Telephone Co., judgment on condemnation of goods attached; L. H. Slabter, attachment before judgment, \$79.20; attachment quashed and judgment upon affidavit.

Has Pet Names—August Muetze, of East St. Louis, Ill., has had an automobile made especially for the purpose of using it as a grocery sample car. Muetze travels through the south of Illinois and Missouri and has so far made a hit with his scheme, especially on account of the novelty in carrying his samples. He is called the automobile grocery drummer and also the red devil grocery traveling motorist.

Blamed the Automobile—Albert McCollum, of Elbridge, Onondaga county, N. Y., was found dead in bed at his home Tuesday under peculiar circumstances, and, of course, the fatality was charged to the automobile, as one happened to be around the day before his death. A few days ago while driving he met an automobile, which frightened his horse. Mr. McCollum was badly strained while trying to control his horse and had since been in bed, where his mother found him dead when she carried his breakfast to him. His death was the result of heart failure.

Forsook Horses—There were horse races and one automobile race in Waterloo, Ia., a few days ago and the large crowd which watched the races was more interested in the red, black and brown devils' race, the last event on the program. Eight cars took part in the 5-mile open race. George Miller, in his 8-horsepower Ford, won in 9:34; W. W. Miller, in a 16-horsepower Rambler, was second, and Al Weis, in an 8-horsepower Ford, was third. The other cars were two Ramblers, two Duryeas and one Waterloo. This single event seemed to interest the people to such an extent that it has been decided to arrange a race meet during the first week in August. Among the events will be a race open to cars belonging to citizens of Waterloo; another to cars owned in Iowa. There will be two free-for-all races and other events.

Automobiles in Cemeteries—At a meeting of the service board of Sandusky, O., Servicer Leser suggested that automobiles ought to be kept out of the cemetery because the roads in the last resting place are narrow and on account of complaints received from people driving teams which, they claimed, usually became frightened at the sight of a motor car. M. Hinde, who is connected with the Sandusky Automobile Co., who took part in the discussion said: "I don't see why you should exclude automobiles from the cemetery. It was only a short time ago that bicycles scared horses. Automobiles have come to stay and the horses must get used to them. I think this matter of horses getting scared at automobiles is all bug-bear. As to keeping motor cars out of the cemetery, I think these people who have automobiles want to go to

funerals as well as those who have horses." M. Leser answered the argument and said he would make inquiries as to what they did in other places before taking any further steps in the matter.

Detroit Starts Early—The Tri-State Automobile and Sporting Goods Association, of Detroit, Mich., which has for 3 years conducted the local automobile show at Detroit, announces that it has claimed as the dates of its fourth show the week immediately following the next Chicago show, or February 13 to 18, inclusive, 1905. Arrangements are being made to conduct the show on a more extensive scale than previously.

Cheap Park Rides—The park commission of the city of New York has given a concession to an automobile company to establish an automobile service through Bronx and Pelham Bay parks. The concession was made for a rather small sum and with the distinct understanding that the rates charged be very reasonable. The main stand will be at the Pelham avenue station of the Third avenue elevated railroad and the following rates will be charged: From that point to Botanical gardens and return, 10 cents; to Zoological park and return, 10 cents; to Pelham Bay park and return, 25 cents. The distance to the latter place is nearly 4 miles and the charge is thus considered very reasonable. The regular carriage charge is \$1 or more for the same trip. The automobile cabs and buses will be under the direct supervision of the department and will operate under regulations which have proved satisfactory in Central park.

Had Good Excuses—About a week ago a fire broke out in Talbott avenue, Indianapolis, Ind. At the time two members of a hose company were dining at Sixteenth street and Ashland avenue and missed the hose wagon when it passed. Hubert Davis, 13 years old, and considered one of the best automobile drivers in the city, was near driving his father's car. The two firemen asked him to take them to the fire, which he did, driving the machine at a speed variously estimated at from 15 to 50 miles an hour. The scene of the fire was reached several minutes before the hose cart. Several citizens who noticed the car being driven at a greater speed than the ordinance permits, complained to the chief of police and young Davis was ordered to appear before Judge Whallon. Chief Coots and other officers of the fire department, as well as some citizens, interested themselves in

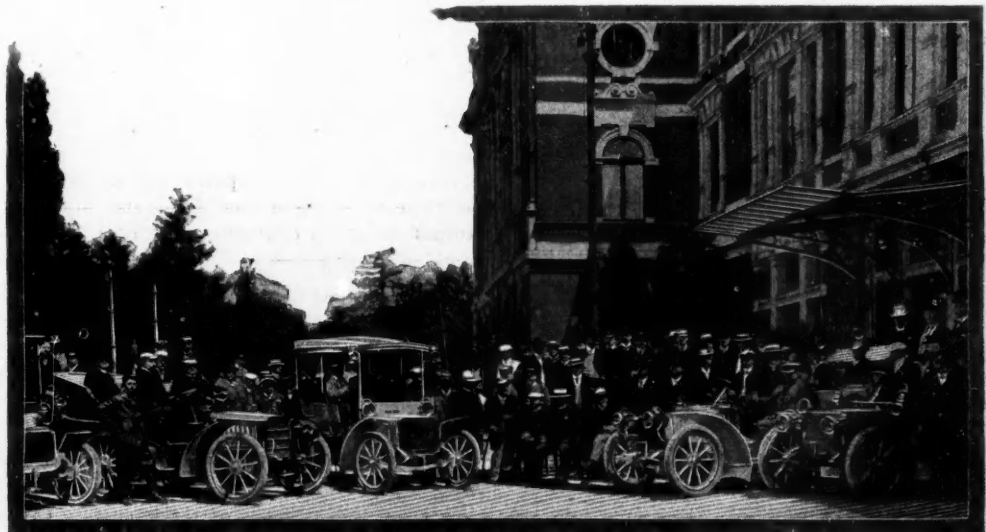
the case and also appeared in court. They explained the circumstances to the judge, who dismissed the case.

Impressions Due—The St. Louis tour will make a few lasting impressions—on horses, on farmers, and on automobilists, particularly on the latter.

Good for Dubuque—The Telegraph, of Dubuque, Ia., contains a note saying that F. Irving Dow, connected with a large automobile concern, has written to Mayor Berg, of Dubuque, that the concern would like to locate its plant in the city and asking for general information concerning taxation, sites, labor questions. The Telegraph adds "that the automobile manufactured by the company sells for \$1,600 and is a cylinder touring car."

Progressive, Anyway—There are about thirty cars owned by citizens of Lincoln, Neb. One dealer is reported to have sold a dozen since the first of the year, while another disposed of ten cars within the last 11 weeks. The cars owned in the Bryan town are mostly runabouts and small touring cars and range in price from \$650 to \$4,000. Of the latter kind there are only two, while there are ten at \$2,000 to \$2,500. The dealers say they cannot fill all the orders they are receiving and that at least a dozen cars are still undelivered. Contrary to the disposition of local authorities in many other cities, those of the Nebraska town are in favor of motoring and the local owners seldom have trouble with them. Many of the principal streets will soon have wood block pavement replaced with asphalt.

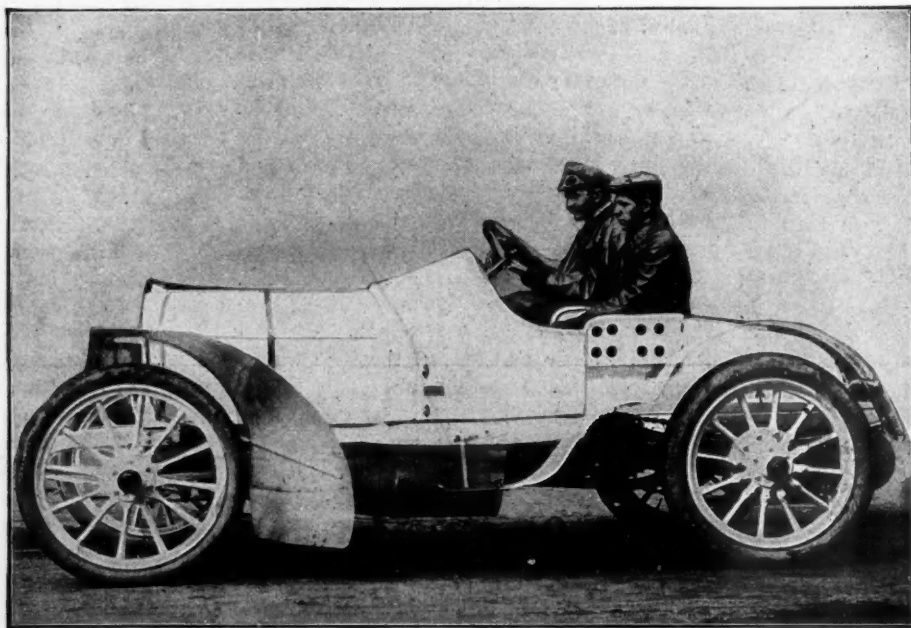
Tennant Expands—The Tennant Auto Tire Co., of Springfield, O., has leased part of the plant of the Continental Rubber Tire Co., at Erie, Pa., on account of previous inadequate manufacturing facilities and increased business. It is reported that the company's business has doubled and that if it continues in as satisfactory a way until the end of the season, and proper encouragement is received from the citizens of Springfield, a large new plant will be erected before next spring. Offices have been opened in New York and Chicago and agencies are being established in other important cities. M. A. Carnell & Co. have the New York, and Malcolm Anthony the Chicago office. Irvin Tennant, president of the company, has been on the road and at the Erie factory during the last 4 weeks. A. C. Martin, who has the agency for the Tennant tire in Porto Rico, reports excellent business.



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